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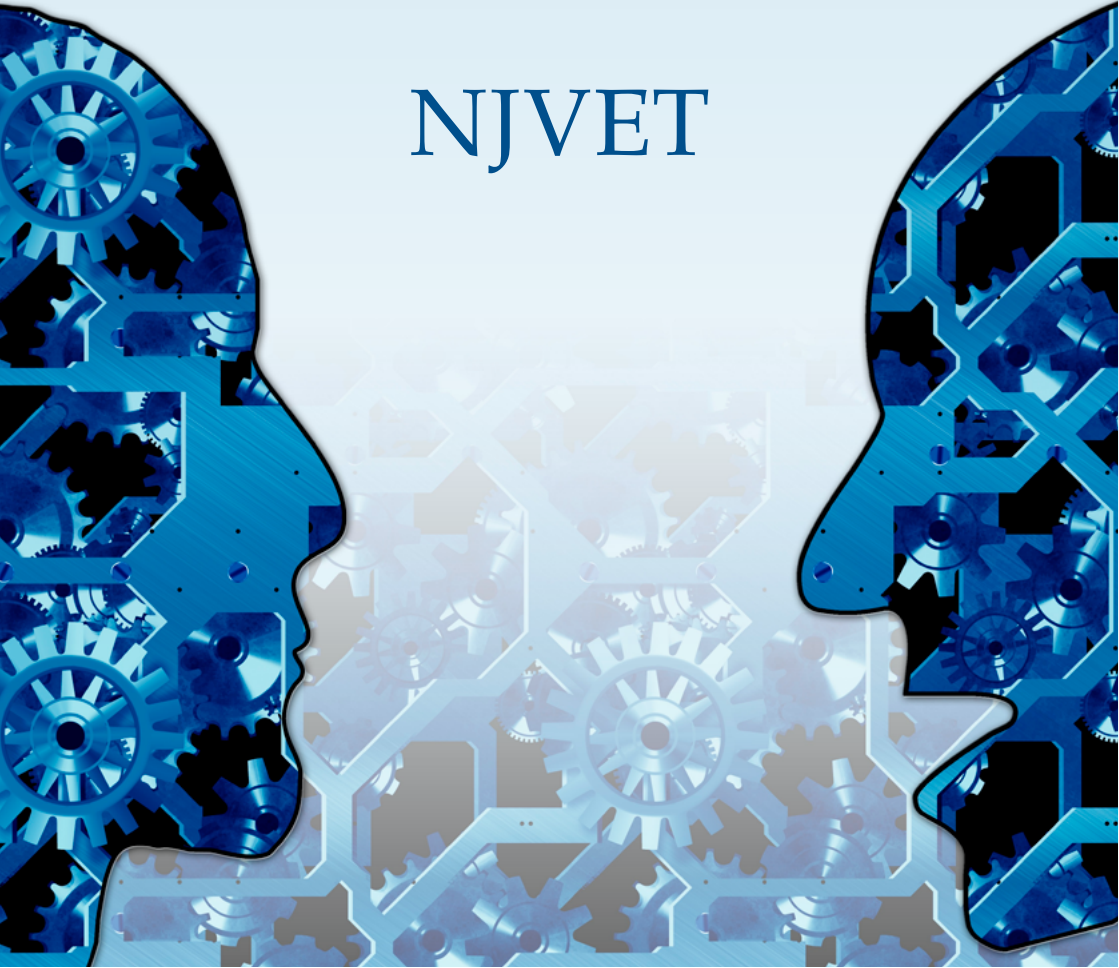




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Utvikling av yrkesetisk kompetanse i ambulansefag: Fra klasserom til pasientmøter

Developing professional ethical competence in ambulance services:
From classroom to patient encounters

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Abstract

This study aims to provide insight into apprentices' perceptions of ethical challenges in ambulance work, their experiences with ethics training, and how ethical competence can be strengthened throughout the educational pathway. Ambulance workers must be capable of providing emergency medical treatment, transporting patients, communicating clearly, acting with empathy, managing stress, and making ethically sound decisions under challenging conditions and time pressure. Professional ethical competence is crucial for handling ethically challenging situations. The data material was generated through interviews with ten apprentices during the period 2021–2023. The study reveals that apprentices experience highly demanding emergency situations where ethics and communication play a central role. Despite their young age, they consider themselves capable of handling the tasks and challenges they face. They possess valuable competencies that must be made visible, acknowledged, recognised, and utilised. Ethical competence develops when they communicate in demanding situations, engage in authentic scenarios followed by reflection, and are challenged to act and make decisions in demanding training situations. The study provides insight into the apprentices' perspectives – knowledge that can support vocational teachers and instructors in facilitating the development of professional ethical competence in ambulance care.

Keywords: ethical challenges, professional ethical competence, ambulance services, upper secondary education



Introduksjon

Ambulansetjenesten er en del av spesialisthelsetjenesten og det akuttmedisinske tilbudet i de regionale helseforetakene (Kjøllesdal & Steen-Hansen, 2016). Tjenesten er, og har vært, under stor utvikling. Fra å dekke et transportbehov til og fra sykehuset på 1960-tallet er den i dag et fagområde med høyteknologisk medisinsk utstyr og komplekse arbeidsoppgaver (Aspelund, 2017; NOU 2015:17, s. 138).

I Norge er ambulansefag et fireårig løp i videregående opplæring bestående av to års opplæring i skole og to års læretid i bedrift. Utdanningen er et programområde under utdanningsprogrammet Helse- og oppvekstfag, og de fleste elevene er i tenårene når de starter. Etter fire år avsluttes løpet med en fagprøve (Utdanning.no, 2024). I perioden 2021–2023 oppnådde årlig rundt 200 ambulansearbeidere fagbrev (Utdanningsdirektoratet, 2024).

Ambulansearbeidere er en sentral del av bemanningen i ambulansetjenesten. De skal kunne utføre akuttmedisinsk behandling og transportere pasienter samtidig som de skal fungere godt i tverrfaglig samarbeid og kunne arbeide selvstendig under pressede og vanskelige forhold. I tillegg skal ambulansearbeidere utøve omsorg, god dømmekraft og godt profesjonelt faglig skjønn, samt ha evne til etisk refleksjon og kritisk tenkning (Utdanningsdirektoratet, 2020). Å arbeide med mennesker i en akutfase i deres liv er krevende. Når unge mennesker i slutten av tenårene skal trenes opp til å håndtere alvorlig sykdom og møte mennesker i krise mangler de ofte erfaringer som voksne har. Gjennom et lengre livsløp har voksne gjerne opparbeidet seg et bredere erfaringsgrunnlag som hjelper dem i etiske vurderinger i krevende situasjoner (Benner, 1984). Opplæring og veiledning i etiske spørsmål og vurderinger innen ambulansearbeid kan styrke ambulanspersonells evne til å navigere i krevende situasjoner hvor etikk er involvert (Armstrong et al., 2019).

I utdanningen av ambulansearbeidere er evne til etisk refleksjon og kritisk tenkning kompetanser som er vesentlige for å kunne foreta etiske vurderinger og bli fortrolige med etiske problemstillinger. Disse kompetansene er forutsetninger for å kunne utvikle god dømmekraft, noe læreplanen og kompetansemålene for ambulansefag synliggjør (Kunnskapsdepartementet, 2017).

Begrepet yrkesetisk kompetanse i denne studien tar utgangspunkt i etikk som systematisk refleksjon over moral (Magelssen & Pedersen, 2025, s. 15). Yrkesetikk er etikk knyttet til utøvelsen av et yrke og består både av et uskrevet felles sett av verdier og normer som antas og anses å være internalisert i yrket gjennom utdanningen og skrevne regler (eksempelvis yrkesetiske retningslinjer) (Molven, 2019). Forståelse av begrepet kompetanse er hentet fra overordnet del av læreplanverket som definerer kompetanse slik: "Kompetanse er å kunne tilegne seg og anvende kunnskaper og ferdigheter til å mestre utfordringer og løse oppgaver i kjente og ukjente sammenhenger og situasjoner. Kompetanse

innebærer forståelse og evne til refleksjon og kritisk tenkning” (Kunnskapsdepartementet, 2017, s. 11).

Yrkesetisk kompetanse handler om evnen til å forstå, reflektere over og handle i tråd med etiske prinsipper og verdier som gjelder for et bestemt yrke. Denne kompetansen er en sentral del av profesjonell praksis – særlig i yrker som innebærer ansvar for andre mennesker (Delta, 2016; Fellesorganisasjonen, 2023). Evne til refleksjon og kritisk tenkning er sentrale ferdigheter i yrkesetisk kompetanse, særlig i yrker som ambulansarbeid der etiske vurderinger er en del av det daglige arbeidet. Der refleksjon er en personlig og erfaringsbasert prosess er kritisk tenkning mer systematisk og analytisk (Dewey, 1933).

Når normer eller verdier står i motsetning til hverandre og det er tvil, usikkerhet eller uenighet om hva som er rett og godt, snakker vi om en etisk utfordring (Magelssen & Pedersen, 2025). Forskning viser at yrkesetisk kompetanse er svært viktig for hvordan ambulansarbeidere håndterer etisk utfordrende situasjoner (Abelsson & Lindwall, 2018; Bremer & Holmberg, 2020; Frank et al., 2024).

Hensikten med denne studien er å gi innsikt i lærlingers opplevelser av yrkesetiske utfordringer i ambulansarbeid, deres erfaringer med opplæringen i etikk, og videre belyse hvordan denne innsikten kan brukes av yrkesfaglærere og lærlingansvarlige, i skole og bedrift, for å tilrettelegge for utvikling av yrkesetisk kompetanse blant elever og lærlinger gjennom det fireårige utdanningsløpet.

Følgende todelte forskningsspørsmål utforskes: *Hvilke yrkesetiske utfordringer opplever lærlinger i ambulansesarbeidet, og hvordan kan yrkesetisk kompetanse styrkes gjennom utdanningsløpet?*

Teoretisk rammeverk

Denne studien bygger på et teoretisk rammeverk som kombinerer perspektiver på etikk og yrkesetisk kompetanse (Nordby, 2014a, 2014b), kommunikasjon i profesjonelle relasjoner (Eide & Eide, 2017) og utvikling av yrkeskompetanse (Hiim & Hippe, 1998, 2001). I tillegg anvendes begrepet koherens i utdanning (Heggen & Smeby, 2012) for å belyse betydningen av å skape helhet og sammenheng i det fireårige utdanningsløpet. Disse teoretiske perspektivene bidrar til å forstå og danner grunnlaget for diskusjonen av hvordan yrkesetisk kompetanse utvikles i ambulansesfaglig opplæring.

Etikk og yrkesetikk

For å belyse ytterligere hva yrkesetisk kompetanse innebærer vil vi i dette avsnittet utdype noen etiske perspektiv som danner grunnlaget for å analysere komplekse situasjoner som ambulanspersonell møter i yrket. Forholdet mellom

fag/yrke og etikk kan forstås som forholdet mellom fakta og verdier. I praksis er det imidlertid vanskelig å ha et skarpt skille mellom disse to da de ofte griper inn i hverandre. I helsefaglige utfordringer, som ofte kan være komplekse, er det ikke alltid enkelt å skille mellom hva som er en faglig utfordring og hva som er en etisk utfordring. Kort sagt kan en skille mellom disse ved å si at en faglig utfordring handler om hva som er fakta eller sant, mens en etisk utfordring handler om hva som er riktig eller godt (Magelssen & Pedersen, 2025).

Yrkesetikk handler om felles forståelse for de verdier yrket skal bygge på. Til tross for prosedyrer og lovverk som regulerer og ivaretar både ambulansearbeideren og pasienten, trengs yrkesetiske standarder og etisk refleksjon, blant annet fordi helsepersonell i dag møter en rekke til dels motstridende krav (Førde & Lillemoen, 2025). Faglige krav kan stå i kontrast til ambulansearbeiderens etiske ståsted, og det kan oppstå et etisk dilemma, altså en situasjon der det ikke er åpenbart hva som er den beste handlingen (Nordby, 2014a). Eksempel på et slikt dilemma kan være ambulansearbeiderens plikt til å redde liv kontra pasientens rett til en verdig død. Hva som er riktig handling vil til enhver tid avhenge av situasjonen, men uansett hvilket valg ambulansearbeideren tar vil han måtte leve med valget i ettertid. Situasjoner som innebærer etiske utfordringer og dilemmaer kan føre til moralsk stress (Magelssen & Pedersen, 2025). For å redusere stressnivået undertrykkes lett idealer. Over tid kan det medføre en belastning med ringvirkninger for både fysisk og psykisk helse (Førde & Lillemoen, 2025; Magelssen & Pedersen, 2025; Aakre, 2009).

Å gjøre riktige valg på bakgrunn av gjeldende etiske retningslinjer er viktig fordi avgjørelser handler *ikke bare om pasienten og pasientens situasjon, men også om hvilke konsekvenser denne avgjørelsen har for den som tar den, for tjenesten og helsevesenet og kanskje også for samfunnet*. Refleksjon og bevissthet rundt etiske utfordringer og vurderinger i ambulansefag er derfor viktig (Magelssen & Pedersen, 2025).

Kommunikasjon

I arbeid med mennesker er kommunikasjon verktøyet ambulansepersonell har for å løse etiske utfordringer. I følge Nordby (2014b) er etiske valg i stor grad knyttet til hvordan kommunikasjonen utøves i praksis. Profesjonell kommunikasjon er faglig basert og forutsetter ulike ferdigheter. Den skal ivareta pasientens behov for trygghet og verdighet, samtidig som det i ambulansearbeid er et viktig verktøy for å innhente informasjon raskt og effektivt. I akutte situasjoner der både språkproduksjon og -forståelse er påvirket, eller der det foreligger språklige eller kulturelle barrierer, stilles det særlige krav til ambulansearbeiderens kommunikative kompetanse. I slike situasjoner får nonverbal kommunikasjon – som berøring, ansiktsuttrykk og kroppsspråk – økt betydning (Eide & Eide, 2017). Samtidig øker risikoen for misforståelser og feiltolkninger, noe som kan

påvirke pasientens opplevelse av å bli behandlet med respekt, og dermed også kvaliteten på samspillet mellom pasienten og ambulansesarbeideren. Manglende kommunikasjon mellom pasient og ambulansespersonell kan skape etiske dilemmaer i klinisk praksis (Bremer & Holmberg, 2020). Bevissthet rundt profesjonell kommunikasjon og etikk kan øke forutsetningene for å oppnå trygghet og tillit, skape gode omsorgsrelasjoner og forstå hva som er gode handlinger (Nordby, 2014a).

Utvikling av yrkesetisk kompetanse i ambulansesfag

Utvikling av yrkesetisk kompetanse i ambulansesfag må forstås som en integrert del av den helhetlige yrkeskompetansen elevene og lærlingene skal tilegne seg i løpet av utdanningen. Yrkeskompetanse i ambulansesfag omfatter kunnskaper, ferdigheter og holdninger om sentrale yrkesoppgaver. Hiim og Hippe (2001) løfter frem et utvidet kunnskapssyn, der kunnskap utvikles i samspillet mellom handling, forståelse og følelse. I dette perspektivet oppstår læring gjennom vekselvirkning mellom praktisk erfaring, teori og refleksjon. Kunnskap kan ikke bare overføres fra lærer til elev – den må erkjennes og erfares i prosess, der grensene mellom det praktiske, det kognitive og det emosjonelle aspektet er tette og overlappende (Hiim & Hippe, 1998, 2001).

I utvikling av yrkesetisk kompetanse er refleksjonen underveis og i etterkant sentral. Refleksjonen fremmer evnen til å analysere og vurdere eget arbeid, noe som er viktig for å opprettholde og heve kvaliteten på helsetjenestene (Magelssen & Pedersen, 2025). Refleksjon åpner for nye perspektiver og andre handlingsalternativer. Etiske metodeverktøy fordrer bruk av tid i refleksjonen, mens utfordringen i ambulansesarbeid er at avgjørelser om valg ofte må tas raskt og de etiske situasjonene er ofte komplekse (Nordby, 2014a).

I tillegg til refleksjon er kritisk tenkning nært knyttet til kompetanseutvikling i etikk og etiske vurderinger. Ferdigheter i kritisk tenkning innebærer å kunne tenke klart, systematisk, rasjonelt og selvstendig for å komme frem til en velbegrunnet beslutning om hva man bør tro, hva man bør gjøre, og/eller hvordan man bør være. Gode ferdigheter i kritisk tenkning er nødvendig for å ha en velbegrunnet oppfatning om hvorvidt noe er godt eller dårlig, sannsynlig eller usannsynlig, moralsk forsvarlig eller moralsk uforsvarlig, vesentlig eller uvesentlig (Antonsen et al., 2023). Som beskrevet tidligere kan etikk defineres som systematisk refleksjon over moral (Magelssen & Pedersen, 2025, s. 15). Forskning på ambulansesarbeid viser at det er behov for opplæring som styrker denne typen refleksjon i møte med etiske utfordringer i praksis (Bremer & Holmberg, 2020), og at refleksjon over egen praksis og utførelse av arbeid er vesentlig for utviklingen av kompetanse (Wihlborg, 2018). Etikk i undervisning og veiledning må også følelsesmessig berøre slik at verdier og holdninger

gjenkjennes i eleven og lærlingen i møte med andre. Da vil yrkesetikken gi større mening for den enkelte (Aasland, 2008).

Koherens i fag- og yrkesopplæring

Det finnes flere studier som forsker på betydningen av opplevd koherens blant lærlinger i fag- og yrkesopplæring (se f.eks. Hanssen & Utvær, 2022; Hiim, 2022; Aakernes, 2018; Aarkrog, 2020), men så langt vi kjenner til finnes det lite forskning som spesifikt kombinerer koherens i yrkesopplæring med utvikling av yrkesetisk kompetanse, noe som aktualiserer denne studien. Når begrepet koherens brukes i utdanningssammenheng kan det forstås som sammenhengen mellom fag og fagområder, mellom teori og praksis, og mellom opplæring i skole og bedrift. Heggen og Smeby (2012) viser til flere former av koherens i kontekst av utdanning. *Programkoherens* omhandler hvordan undervisning, veiledning og praksislæring bidrar til å skape sammenheng. *Overgangskoherens* handler blant annet om overgangen mellom skole og læretid og overgangen fra utdanning til oppstart i et yrke. *Biografisk koherens* handler om at læring og opplevelse av meningsfulle sammenhenger bygges på allerede kjente erfaringer (Heggen & Smeby, 2012). Alle de tre formene har betydning for hvordan skolen gjennom undervisning, veiledning og praksis klarer å skape koherens og mening. For å oppnå programkoherens er det viktig at skolen og bedriften samarbeider om et felles rammeverk som kobler læringsutbytter, læringsaktiviteter og vurdering (Hammerness & Klette, 2015). Overgangskoherens kan styrkes ved å sørge for en sømløs overgang fra vg2 som er det andre året på skolen, til læretid i bedrift. Et eksempel på dette er at elevene under praksisopplæringen på skolen får trening i reelle situasjoner, som kan speile oppgavene de møter i læretiden, noe som skaper en opplevelse av kontinuitet. Biografisk koherens kan styrkes gjennom å bruke elevens erfaringer for å skape sammenheng i møte med ny kunnskap. Selv om de er unge og har få erfaringer med yrkesetikk i ambulansefaget, har de med seg verdier, holdninger, kunnskaper og erfaringer ervervet gjennom barndom, oppvekst og tidligere skolegang som kan utvikles og nyttiggjøres for å skape meningsfulle sammenhenger (Heggen & Smeby, 2012).

Metode

Forskningsdesign, utvalg og rekruttering

For å utforske forskningsspørsmålet har vi valgt en kvalitativ undersøkende intervjustudie. Med utgangspunkt i intervjudeltakernes opplevelser, som i denne studien er lærlinger i ambulansefag, vil en slik tilnærming søke å belyse intervjudeltagernes perspektiv (Brinkmann & Tanggaard, 2012). Lærlingene ble rekruttert ved at det ble sendt ut en forespørsel om deltagelse via lærling-

ansvarlige i tre helseforetak i Midt-Norge. Tre foretak ble valgt for å få større perspektivrikdom i lærlingenes opplevelser av opplæringen i skole og bedrift. Et annet inklusjonskriterium var at lærlingene var tatt inn i ordinær videregående skole med ungdomsrett, dette fordi vi ønsket å inkludere ungdom og ikke voksne som hadde tilbragt mange år i yrkeslivet før påbegynt utdanning. Et tredje inklusjonskriterium var at de skulle ha vært lærling i omtrent ett år da intervjuet ble gjennomført. Dette for å sikre at de hadde rukket å få erfaringer i rollen som lærling samtidig som at de hadde skoledelen av opplæringen forholdsvis ferskt i minne. Ett fjerde inklusjonskriterium var å sikre informanter av begge kjønn og ulike etnisk bakgrunn for å gjenspeile populasjonen. Andelen menn i ambulansetjenesten har tradisjonelt vært større enn kvinner, men var i 2024 forholdsvis lik (Hauge, 2024). Nærmere 20% av de sysselsatte i helse- og omsorgstjenestene er innvandrere (Fedoryshyn & Falch-Monsen, 2024), men mangfoldet i ambulansetjenesten skulle gjerne vært større (Bazaz, 2023).

Tabell 1. Oversikt over intervjudeltagerne.

Intervjudeltager	Gjennomført intervju	Skole	Helseforetak	Læretid	Kjønn	Alder	Etnisitet
Lærling 1	Høst 2021	Skole 1	Helseforetak 1	13 mnd	Kvinne	19 år	Norsk
Lærling 2	Høst 2021	Skole 1	Helseforetak 1	13 mnd	Kvinne	19 år	Norsk
Lærling 3	Høst 2021	Skole 2	Helseforetak 2	13 mnd	Mann	20 år	Norsk
Lærling 4	Høst 2021	Skole 2	Helseforetak 2	14 mnd	Mann	19 år	Norsk
Lærling 5	Høst 2023	Skole 1	Helseforetak 1	14 mnd	Kvinne	19 år	Norsk
Lærling 6	Høst 2023	Skole 1	Helseforetak 1	14 mnd	Mann	19 år	Norsk
Lærling 7	Høst 2023	Skole 2	Helseforetak 2	16 mnd	Mann	19 år	Innvandrer
Lærling 8	Høst 2023	Skole 2	Helseforetak 2	16 mnd	Kvinne	19 år	Norsk
Lærling 9	Høst 2023	Skole 3	Helseforetak 3	16 mnd	Mann	19 år	Norsk
Lærling 10	Høst 2023	Skole 3	Helseforetak 3	16 mnd	Mann	19 år	Norsk

Data ble generert fra ti intervjudeltagere; fire kvinner og seks menn hvorav en var innvandrer og hadde norsk som 2. språk (Tabell 1). Elevperspektivet kommer til syne gjennom lærlingenes retrospektive refleksjoner. Når vi i artikkelen presenterer funnene viser vi ikke til hvem av intervjudeltagerne som sa hva da vi ikke fant store individuelle forskjeller som vi mener har betydning for diskusjonen. Vi benevner alle lærlinger som han uavhengig av kjønn.

Datagenerering

Fire intervju ble gjennomført i forbindelse med førsteforfatters masteroppgave høsten 2021. For å utvide og gjenspeile populasjonen bedre ble datamaterialet

supplert med intervju av seks nye deltagere høsten 2023. Intervjuene fant i hovedsak sted på deltagernes arbeidssted.

Intervjuene hadde en åpen induktiv tilnærming og intervjuguiden besto av åpne spørsmål. En semistrukturert strategi ble benyttet for at intervjudeltagerne skulle få mulighet for å bringe inn nye dimensjoner utover de forhåndsbestemte spørsmålene. Spørsmålene utforsket lærlingenes opplevelser i møte med yrkesetiske utfordringer i ambulansearbeid. De ble blant annet oppmuntret til å dele erfaringer fra situasjoner der de følte at de hadde lyktes godt og situasjoner der de opplevde det motsatte. Hvordan skolen og bedriftene hadde tilrettelagt for deres utvikling av yrkesetisk kompetanse ble også utforsket. Det ble benyttet lydopptaker, og hvert intervju varte fra 35 til 60 minutter, i snitt 50 minutter.

Analyse av data

Intervjuene ble transkribert ordrett av førsteforfatter umiddelbart etter hvert intervju. Transkripsjonene ble så analysert med utgangspunkt i Braun og Clarkes beskrivelser av tematisk analyse (2022). Deres refleksive tilnærming til tematisk analyse innebærer en prosess på seks faser; 1) gjøre seg kjent med datamaterialet, 2) kode datamaterialet, 3) generere innledende temaer, 4) videreutvikle temaene, 5) definere og navnsatte temaene og 6) rapportere funn (Braun & Clarke, 2022). Det todelte forskningsspørsmålet og analysetilnærmingen i denne studien tilhører det kvalitative paradigme, nærmere sagt konstruktivismen, der språk, refleksivitet, subjektivitet og mening inngår som sentrale elementer i analyseprosessen (Braun & Clarke, 2022).

Transkripsjonene ble lest flere ganger av begge forfatterne (fase 1). For å fange essensen i materialet startet vi med en induktiv, åpen koding for å identifisere segmenter i datamaterialet som vi fant interessant, relevant eller meningsfullt i relasjon til forskningsspørsmålet (fase 2).

Med kodene som utgangspunkt diskuterte vi mønster av mening på tvers av intervjudeltagere, noe som innebærer å sortere data i mer generelle temaer (fase 3). Et tema i refleksiv tematisk analyse er et mønster av delt mening organisert rundt sentrale begrep (Braun & Clarke, 2022). I denne fasen gikk vi også tilbake til kodene for å diskutere nyanser og meningsinnhold. Kodingen, som i utgangspunktet var induktiv og semantisk, gikk nå over i en fase som ble mer latent og deduktiv der både vår for forståelse og valgte teorier influerte analysen for å avdekke dypere meningsmønstre. For eksempel når lærlingene på ulike vis ga uttrykk for å lykkes navnsatte vi dette som mestring.

Etter hvert som vi fikk en større forståelse av innholdet i datamaterialet, ble temaene videreutviklet og navnsatt. Til sist i analyseprosessen ble temaene sortert i to overordnede tema (fase 4 og 5). Overordnede tema kan ses på som en måte å strukturere eller organisere temaene på og kan være styrt av forskningsspørsmålene (Braun & Clarke, 2022). Fase 1 og 2 ble gjort hver for seg, mens fase

3–6 ble gjort av forfatterne i fellesskap. I Tabell 2 presenteres et eksempel på hvordan kodene ble samlet til et tema.

Tabell 2. Eksempel på tematisering av koder med utdrag fra intervju.

Utdrag fra intervju	Tema	Koder
Det er jo et liv du har ansvar for, og det du gjør har stor betydning for det livet. Man vil jo ikke gjøre noe feil. Det tenker jeg mye på.	Ta etiske valg	Handle til pasientens beste, stort ansvar, flere handlingsalternativ og tidspress

Etiske betraktninger

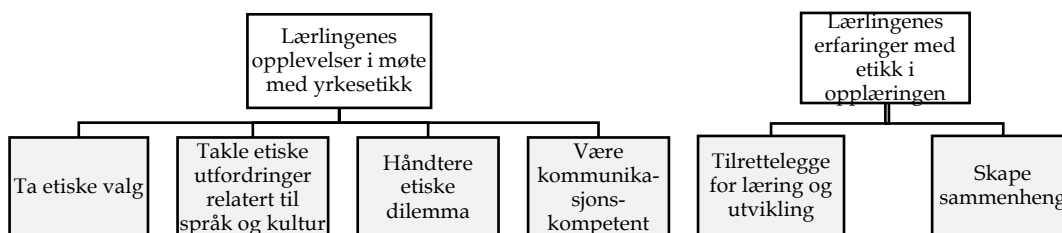
Gjennom hele forskningsprosessen har vi prøvd å ha et reflektert forhold til hvordan våre livs- og yrkeserfaringer samt identitet har påvirket det genererte datamaterialet, analyseprosessen og det ferdige produktet. Førsteforfatter har god kjennskap til videregående opplæring og gruppen intervjudeltagerne representerer gjennom å ha arbeidet mange år som yrkesfaglærer i ambulansefag. Hun har i tillegg jobbet i ambulansetjenesten, og kan betraktes som det Braun og Clarke (2022) beskriver som en forsker med både innside- og utsideblikk. Andreforfatter har lang erfaring med utøvelse av sykepleie og med sykepleier- og yrkesfaglærerutdanning, men har ikke jobbet spesifikt i eller med ambulansefag. Samlet sett har vi både nærhet og avstand til ambulansearbeid som fag og yrke, og vi har begge lang erfaring med å tilrettelegge for utvikling av yrkeskompetanse og kommunisere med ungdom.

I gjennomføringen av studien har vi vært opptatt av de etiske sidene knyttet til intervjuers samtaler med de unge lærlingene. Dette har vært særlig viktig siden temaene vi har snakket om kan oppleves sårbare eller belastende, og vi har lagt vekt på å møte intervjudeltakerne med respekt, åpenhet og med en lyttende holdning. Studien er godkjent av Sikt, som vurderer og godkjenner forskningsprosjekter i henhold til personvernregelverket og gjeldende forskningsetiske retningslinjer i Norge, og har prosjektnummer 928494.

Presentasjon av funn

Studiens funn vil bli presentert som to overordnede tema: 1) *Lærlingenes opplevelser i møte med yrkesetikk* som omhandler lærlingenes opplevelser knyttet til etiske utfordringer og 2) *Lærlingenes erfaringer med opplæringen i etikk* som omhandler erfaringer med etikkopplæringen i skole og bedrift. Under hvert av de to overordnede temaene har kodene fra fase 2 i analysen blitt organisert rundt

henholdsvis fire og to tema. Studiens funn vil være utgangspunktet for diskusjonen av hvordan yrkesetisk kompetanse kan styrkes gjennom utdanningsløpet. En oversikt over overordnede tema med tilhørende tema presenteres i Figur 1.



Figur 1. Oversikt over analysens overordnede tema og tema.

Lærlingenes opplevelser i møte med yrkesetikk

Vi vil starte med å presentere funn knyttet til intervjudeltagernes opplevelser av yrkesetiske utfordringer som lærlinger i ambulansesfag. De genererte temaene er: *Ta etiske valg*, *Takle etiske utfordringer relatert til språk og kultur*, *Håndtere etiske dilemma* og *Være kommunikasjonskompetent*.

Ta etiske valg

Lærlingene i studien ga uttrykk for stor omsorg for pasientene, og oppga hensynet til pasientens beste som utgangspunkt for all hjelp og behandling. En sa at man i mange situasjoner må tenke ekstra godt etter hva som blir "best mulig" og ta avgjørelser basert på det. "Noen ganger trenger det ikke å være det pasienten først tenker er rett som er den beste avgjørelsen på sikt. Da er det viktig at vi gir nok og riktig informasjon til pasienten."

Flere lærlinger ga uttrykk for at de opplever at det å være ambulansearbeider innebærer et stort ansvar, og at det er et ansvar de tar på alvor. Ansvar de kjenner på preger både tanker, følelser og handlinger. En av dem uttrykte det slik: "Det er jo et liv du har ansvar for, og det du gjør har stor betydning for *det* livet. Man vil jo ikke gjøre noe feil. Det tenker jeg mye på."

En av lærlingene sa han hadde opplevd å miste nære pårørende som barn og at han trodde den erfaringen hadde gjort han sterkere i møte med krevende situasjoner. En annen sa han tror oppdragelse og erfaringer har betydning for valg han gjør: "Vi har jo alle opplevd noe som barn og unge." Videre sa han: "Hvis du har en krevende situasjon som går bra, så gjør det noe med deg og du tar med deg erfaringen inn i neste situasjon."

En annen lærling sa at det er godt å gå med erfarne folk som har vært i lignende situasjoner før, spesielt når det må tas avgjørelser hvor de står mellom

flere handlingsalternativ. En annen lærling fortalte at det går bra når han står i den krevende situasjonen, men at han etterpå ofte blir lei seg, tenker mye på det som har skjedd, blir litt stille og grubler en del. Han sa: "Mange situasjoner kan sitte i tankene en stund, men jeg sliter ikke med tunge tanker over lang tid."

Det kommer tydelig frem av intervjudeltagerne at ambulansearbeid innebærer situasjoner der handlingsvalgene ikke er åpenbare og der tidspress gjør at valg må tas hurtig. En lærling uttrykte dette slik: "Det kan være krevende når jeg ser at pasientene er bekymret og trenger omsorg og tid samtidig som arbeidsoppgavene må gjøres raskt." En annen sier: "Pasienten trenger blod her og nå, men han nekter å godta. Hva er det som er riktig og galt da? Man blir liksom skubbet litt i et hjørne og må ta en avgjørelse om hva som er rett." Dette synliggjør hvordan lærlingene opplever at ambulansearbeid preges av vurderinger der tidspress, etiske og menneskelige hensyn er sentrale i situasjonene.

Takle etiske utfordringer relatert til språk og kultur

Alle lærlingene uttrykte at ambulanseyrket innebærer situasjoner som er vanskelige å takle. En av lærlingene fortalte om språkutfordringer i møte med en akutt syk pasient som ikke behersket norsk og der pårørende ble brukt som tolk. Pasienten hadde symptomer på hjerneslag, noe som tilsa at det var viktig med rask behandling og transport for å begrense potensiell hjerneskade. Samtidig måtte ambulansepersonellet vise empati og trygghet gjennom kroppsspråket. Lærlingen fortalte hvordan han brukte blick, smil og berøring for å skape denne tryggheten, og hvordan de i samarbeid klarte å gjøre pasienten informert og trygg samtidig som de fikk jobbet effektivt med tanke på tid og tilstand. Erfaringen ga lærlingen en god følelse av å ha taklet en situasjon som i utgangspunktet opplevdes etisk krevende. To andre lærlinger pekte på utfordringer i situasjoner der pasienten av en eller annen grunn mangler verbalt språk. En fortalte om en slik episode med en pasient med psykisk utviklingshemming. "Jeg så at han var redd og skjønte at han hadde brystmerter. Vi måtte bruke kroppsspråk og språk tegn, og fikk etter hvert fin kontakt." En annen sa: "Da prøver jeg å tenke på lignende situasjoner med tidligere pasienter, og det hjelper meg til å forstå eller anta hva det er pasienten lur på."

Situasjoner knyttet til kulturelle forskjeller ble av flere lærlinger nevnt som eksempler på etiske utfordringer. En lærling fortalte om en episode der ektefellen til pasienten ikke var fortrolig med at mannlige ambulansearbeidere skulle sette elektrodelapper på brystet til kona for å ta EKG. "Jeg synes det var ubehagelig. Jeg ble lei meg på deres vegne og redd for at jeg skulle trå over en grense for deres del. Samtidig var det viktig å få tatt det EKG-et." En annen lærling fortalte at det kan være vanskelig i situasjoner der pasienten ikke ønsker å vise hud. "Jeg må løfte på klær for å undersøke godt, så da bruker jeg lang tid på å forklare og

fortelle hvorfor og hva jeg gjør.” Lærlingene viser her gjennom det de sier, sine refleksjoner i etiske utfordringer relatert til språk og kultur.

Håndtere etiske dilemma

Lærlingene møter mange varianter av etiske dilemma i løpet av opplæringstiden i skole og bedrift. Teori de har lært på skolen kan utfordres i møte med praksis. Opplevelsen av å ikke ha tilstrekkelig kompetanse kan også gjøre vurderinger mer krevende. Flere lærlinger fortalte om dilemma relatert til balansen mellom det å være ærlig og å lyve. ”Hvor ærlig skal du være, og hva skal du si, når en kritisk syk pasient spør deg engstelig om han kommer til å dø?” Lærlingen sa at han skjønner at pasientens liv er i fare, men at det er vanskelig å vurdere hvor syk han faktisk er. Han fortsetter: ”Og så sitter jeg der, og jeg skjønner ikke hele sykdomsbildet. Da blir det vanskelig for meg å gi den tryggheten [avkrefte død] uten å skulle lyve.” En annen lærling problematiserte en annen side ved dilemmaet: ”Hvor etisk riktig er det å lyve? Vil du ha en rolig pasient der du kan jobbe godt, eller vil du ha en hysterisk pasient? Det er jo veldig vanskelig, å lyve har jo både positive og negative sider.”

Hendelser der psykisk lidelse og/eller rus er involvert nevnes av flere lærlinger som eksempler på situasjoner der etiske dilemma kan oppstå. En lærling fortalte om et slikt oppdrag der en pasient var hardt skadet og hadde behov for akutt medisinsk hjelp. Mens de behandlet pasienten trakk han plutselig frem en kniv og truet ambulansepersonellet. De måtte raskt trekke seg unna samtidig som de så pasientens behov for hjelp.

En lærling fortalte om et oppdrag der legen mente det ikke skulle gis mer smertestillende samtidig som pasienten fortsatt ga uttrykk for mye smerter og var aggressiv. Lærlingen følte at det oppsto en konflikt mellom han og pasienten siden det var han som satt ved pasienten. ”Jeg så at pasienten hadde det vondt, men jeg kunne liksom ikke knuse [motsi] legens ord heller. Det er jo han som bestemmer.” Lærlingen ga uttrykk for at situasjonen var vanskelig å forstå. Etter å ha snakket med makkeren sin fikk han større forståelse for legens vurdering.

Være kommunikasjonskompetent

God kommunikasjon oppleves som essensielt for å kunne skape trygghet i møte med pasienter og pårørende. En lærling forklarte det slik: ”Den tryggheten og roen vi viser, den smitter over på de andre.” En annen lærling sa at pasientene kan føle seg utrygge hvis ikke kommunikasjonen er god, og at de dermed kan bli usikre på den hjelpen de får. En tredje sa at han opplever at kunnskap gir han trygghet slik at han igjen kan gi trygghet til pasienten. Han fortalte at han har stort fokus på å kontinuerlig tilegne seg mer kunnskap.

En av lærlingene løftet fram sin unge alder som en fordel i kommunikasjon med unge pasienter. Han fortalte om et akuttoppdrag til en ung jente som truet

med å skade seg selv, og som nektet å åpne døra. Politiet var tilkalt for å bryte opp døra da lærlingen ba om å få prøve å snakke med jenta. Lærlingen gikk fram til et åpent vindu og snakket rolig til henne. Etter noen minutter klarte lærlingen å oppnå tillit nok til at hun åpnet døra slik at ambulansepersonellet kunne starte behandling. Han følte at felles alder påvirket utfallet av situasjonen.

Å mestre utfordrende situasjoner gir en god følelse som styrker selvtilliten. En lærling fortalte om en episode tidlig i lærlingeløpet der en pasient hadde brystmerter og var veldig urolig og redd. Lærlingen erfarte hvordan hans ro smittet over på pasienten og hvordan dette påvirket samspillet og kommunikasjonen positivt. Den gode kommunikasjonen åpnet for at undersøkelsen og behandlingen gikk raskt. Lærlingen beskrev det han opplevde som "en helt utrolig følelse" som styrket selvtilliten. Han fortalte også at opplevelsen av å ikke mestre situasjoner gjør at han begynner å tvile på seg selv og egen kompetanse.

Lærlingene uttrykte behov for mer trening i kommunikasjon i vanskelige situasjoner, som ved dødsfall. En lærling fortalte om et oppdrag der pappaen hadde tatt sitt eget liv og hele familien med barn, ektefelle og en onkel var til stede. Han syntes det var så ubehagelig å ikke vite hva han skulle si eller gjøre. "Jeg skulle ønske vi ikke bare hadde øvd på gjenoppliving av døde, men også på hvordan man prater med familien etterpå." En annen lærling fortalte om en situasjon der han måtte snakke med mor og sønn om dødsfallet til sønnens far. Sønnen var på samme alder som lærlingen, og lærlingen fortalte at han syntes det var "veldig tungt". "Jeg tenkte at det kunne vært meg i stedet for gutten, og følte meg veldig lei meg. Det var vanskelig å vite hva jeg skulle si."

Kommunikasjonsferdigheter både i verbal kommunikasjon og i kroppsspråk fremsto som viktig hos deltakerne. Flere ga eksempler på hvordan de observerte kroppsspråket til pasienten eller pårørende, men også hvordan de var bevisst på sitt eget kroppsspråk. En lærling beskrev hvordan han håndterte en vanskelig situasjon ved å først hente støttende blikk fra veileder som igjen ga han mot til å være i situasjonen og utføre jobben. Dette var en situasjon der ektemannen til pasienten var svært skeptisk til at en mannlig ambulansearbeider skulle undersøke og behandle ektefellen. Med mental støtte fra veileder, brukte lærlingen nonverbal kommunikasjon som blikk og varsomme bevegelser for å oppnå tillit og aksept. Samtidig snakket han med rolig stemme til pasienten og mannen. Etter hvert opplevde lærlingen å få et blikk fra ektemannen som han tolket som et slags "grønt lys" for å fortsette, og at han dermed kunne fortsette behandlingen. Videre kommenterte lærlingen at denne hendelsen er noe han tenker tilbake på når han kommer i lignende situasjoner.

Lærlingenes erfaringer med etikk i opplæringen

I denne delen vil vi presentere funn knyttet til lærlingenes erfaringer av opplæringen i etikk gjennom utdanningsløpet. Følgende to tema ble generert: *Tilrettelegge for læring og utvikling* og *Skape sammenheng*.

Tilrettelegge for læring og utvikling

Lærlingene ga eksempler på flere læringsaktiviteter som ble benyttet i skoledelen av opplæringen for å tilrettelegge for utvikling av etisk kompetanse. Bruk av rollespill der elevene selv måtte sette ord på følelser og tanker var brukt i etikkundervisningen. Likeså rollespill med utgangspunkt i caser der etiske situasjoner var tema. Slike caseoppgaver gjorde at de ble mer kjent med yrkesetiske problemstillinger. Lærlingene opplevde at kombinasjonen case-rollespill ga de en god forberedelse på hva de kunne møte i yrket. Konstruktive og konkrete tilbakemeldinger etter slike oppgaver ble fremhevet som viktig. Flere av lærlingene sa at de opplevde kommunikasjon og etikk som en så stor del av yrket, at når de så tilbake på skoleløpet mente de det burde vært flere praktiske øvinger med kommunikasjon og etikk som tema. Det burde også vært mer trening på kommunikasjon i møte med mennesker med ulike psykiske sykdommer og rusproblematikk, noe flere lærlinger uttrykker de har behov for i utøvelsen av yrket.

Det fortelles om yrkeslærere som i skoledelen av opplæringen pushet dem utenfor komfortsonen. I praktiske caser der etiske dilemma var involvert ble de som elever for eksempel utfordret til å ta avgjørelser der det ikke fantes opplagte eller klare svar. Dette opplevdes vanskelig når de sto i situasjonen, men i ettertid ser de at de lærte mye av dem, og husker disse læringssituasjonene godt.

En lærling opplevde at yrkesfaglærere i skolen la vel mye vekt på det han kaller "det tekniske" ved ambulansearbeid. "Vi trodde jo det var full action med uttak av bil og trykkavlastning på pasienter annenhver dag liksom. Men da jeg begynte som lærling så jeg fort at oppdragene var annerledes enn jeg hadde forventet." En annen lærling fortalte at terpinga på systematikk gjennom simulering og praktiske øvelser var viktig. Ved krevende oppdrag øker stressnivået i kroppen. Innlærte ferdigheter som de hadde terpet og øvd på, både i skoledelen og i lærlingtiden, skapte trygghet og mestring i kaotiske situasjoner. Han mente systematisk øving på etiske vurderinger burde fått større plass i utdanningen. En tredje lærling påpekte at det at de ble drillet på undersøkelsesmetodikk på skolen hadde vært viktig for hans opplevelse av mestring, spesielt i starten av læretiden. Han sa: "Denne systematikken [undersøkelsesmetodikk] kunne også vært innøvd når det gjelder etisk refleksjon."

Flere av lærlingene pekte på samtaler med veilederen, kollegaer eller andre lærlinger som viktige for å bearbeide følelser i etterkant av vanskelige situasjoner. De sa imidlertid at hvorvidt slike samtaler var satt i system var avhengig

av kulturen på stasjonen og hvordan veilederen er. En av lærlingene var opptatt av at lærlingene selv hadde ansvar for å si fra hvis noe var vanskelig og uttrykte: "Jeg tror ikke det er bra når du er lærling å skulle bære den byrden alene."

Skape sammenheng

Undervisningen i skoledelen av utdanningen ble lettere å forstå når lærerne brukte eksempler fra reelle situasjoner. Flere lærlinger ga uttrykk for at lærere med ambulansebakgrunn lyktes bedre med dette enn lærere uten god kjennskap til yrket. Å ha besøk på skolen eller være på ekskursjon ble fremhevet som lærerikt for å få innblikk i arbeidet til samarbeidende aktører.

En lærling fortalte at han opplevde samme type terping i læretiden som han hadde lært på skolen. Han sa det var systematikk i evaluering og refleksjon etter oppdrag uansett oppdragets alvorlighetsgrad. Han fortalte at han fant trygghet i denne gjenkjennbarheten. En annen sa han opplevde at yrkesfaglærerne "snakket samme språk" som veilederen hans i bedriften, og at det bidro til større forståelse.

Lærlinglivet opplevdes av flere som en fortsettelse av skoleløpet. En lærling fortalte at "skoleåret [Vg2] var som en grunnmur" der undervisningen startet med grunnleggende forståelse og endte med komplekse pasientcaser. En annen mente skoledelen av opplæringen hadde gitt han "en viktig startkapital". Samtidig med at flere hadde opplevd årene i videregående skole som et viktig fundament for videre opplæring svarte to av lærlingene at de opplevde skolen og ambulansetjenesten som to forskjellige organisasjoner som ikke alltid snakker samme språk.

Diskusjon

Yrkesetisk kompetanse står helt sentralt i ambulansesarbeideres arbeidshverdag. I denne diskusjonen vil vi først oppsummere vår forståelse av lærlingenes opplevelser og erfaringer av yrkesetiske utfordringer. Dette kan gi innsikt i deres læreforutsetninger som er vesentlig i tilrettelegging av og for læring (Hiim & Hippe, 1998, 2001). Deretter vil vi diskutere hvordan yrkesetisk kompetanse kan styrkes gjennom utdanningsløpet. Dette vil vi gjøre ved å sette fokus på betydningen av kommunikasjon, ulike læringsaktiviteter og koherens i det fireårige utdanningsløpet.

Fra opplevelse til innsikt: Et innblikk i læreforutsetninger i møte med etiske utfordringer

Lærlingene i studien gir uttrykk for læring, mestring og selvtillit i møte med realistiske arbeidsoppdrag. Funnene viser unge mennesker med mot, styrke og ansvarsbevissthet. Samtidig som de forteller om mestringsfølelse og yrkes-

stolthet, deler de følelser relatert til usikkerhet, sårbarhet og tilkortkommenhet: Hva skal vi si i møte med døende? Hva skal vi gjøre når noen uten forvarsel trekker frem en kniv? Hva er best, og hva er rett? Samtidig som de undrer seg over disse spørsmålene prøver de å finne svar. Det er tydelig at møte med mennesker i svært sårbare situasjoner setter spor, og det kan virke som at menneskemøtene i ambulansearbeid påskynder modenhet så vel som personlig og faglig vekst. De forteller at vanskelige opplevelser "kan sitte i tankene en stund", at de identifiserer seg ("det kunne vært meg") og de opplever at det er viktig å snakke om vanskelige opplevelser slik at de ikke må "bære byrden alene". De kjenner på et stort ansvar, og de signaliserer at det er krevende å håndtere et mangfold av beslutninger, ofte under tidspress. Det lærlingene forteller gir faglærere og lærlingansvarlige en innsikt i elevenes og lærlingenes læreforutsetninger, noe som er sentralt i tilrettelegging av undervisningen (Hiim & Hippe, 1998, 2003).

Videre beskriver de følelsen av å "redde liv", "snu situasjoner" og "få grønt lys" gjennom bruk av verbal og nonverbal kommunikasjon. Disse erfaringene skaper mestringsfølelse og selvtillit, og lærlingene bruker disse erfaringene inn i nye situasjoner og oppdrag. Lærlingenes evne til kritisk tenkning kommer til syne når de forteller om krevende oppdrag der arbeidsoppgavene må gjøres raskt og de må ta avgjørelser om hva som er rett. Som lærlingen som beskriver situasjonen der en alvorlig syk pasient spør om hen kommer til å dø. Lærlingen vet at pasienten er i en kritisk tilstand, men mangler både medisinsk kompetanse og erfaring til å vurdere helhetsbildet – og ønsker samtidig å gi trygghet. Med det viser lærlingen evne til å analysere en situasjon som er kompleks og der flere hensyn må veies opp mot hverandre. Ferdigheter i kritisk tenkning er viktig for å kunne ta velbegrunnede beslutninger og er basert på systematisk, rasjonell og selvstendig tenkning om hva man bør gjøre eller hvordan man bør være (Antonsen et al., 2023). Denne evnen til kritisk tenkning er nært knyttet til etisk kompetanseutvikling.

Andre kilder viser også at unge ambulansearbeidere opplever at det er mentalt krevende å være tett på mennesker i svært sårbare situasjoner. På oppdrag forventes det at de håndterer ulike etiske krevende situasjoner og opptrer etisk forsvarlig (Abelsson & Lindwall, 2018; Bremer & Holmberg, 2020). Studien viser at selv om oppdragene i ambulansetjenesten kan være krevende og lærlingene er unge når de starter i lære, kan det se ut som at de håndterer situasjonene og arbeidsoppgavene som møter dem i yrket og er på god vei mot målet om formell yrkeskompetanse.

Etikk og kommunikasjon: Som hånd i hanske i yrkesutøvelsen

Det er vanskelig å se for seg en etisk situasjon i helsearbeid der kommunikasjon ikke spiller en rolle. For å sikre god kommunikasjon, enten det gjelder pasienter,

pårørende eller kollegaer, er det viktig å forstå den man kommuniserer med, og tilpasse sin egen måte å kommunisere på til den andre (Nordby, 2014a). Dette fordrer både kunnskap om den man kommuniserer med, men også øving på ulike situasjoner.

Lærningene beskrev hvordan de brukte kroppsspråket i kommunikasjon med pasienter, pårørende og kollegaer. Selv der ambulansespersonellet må bruke tolk i den verbale kommunikasjonen vil deres kroppsspråk være viktig for den helhetlige gode kommunikasjonen. Konstruktive og konkrete tilbakemeldinger på hvordan eget og andres kroppsspråk kommuniserer vil styrke elevers og lærlingers bevissthet rundt dette. God kommunikasjon gir mulighet for å påvirke en situasjon ved å deskalere den, på samme måte som dårlig kommunikasjon kan føre til at en negativ situasjon eskalerer (Lund, 2019). Komplekse øvingsscenarier der elevene må håndtere medisinske eller skadde pasienter og samtidig blir utfordret på kommunikative vanskelige samtaler som kan oppstå, bidrar til kompetanseutvikling. Lærningens uttalelse om at han skulle ønske at de hadde øvd på å snakke med pårørende etter dødsfall, støtter opp om at slike øvingsscenarier er betydningsfulle for utvikling av yrkesetisk kompetanse i ambulansearbeid.

Flere av intervjudeltagerne pekte på etisk krevende situasjoner som involverte språkutfordringer. I et samfunn preget av mangfold må ambulansesarbeideren ha kunnskap og innsikt i problemstillinger knyttet til flerkulturelle møter (Nordhus, 2021). En kultursensitiv tilnærming i undervisningen vil innebære å være åpen og bevisst både eget og andre menneskers kulturelle utgangspunkt (Nordhus, 2021). Fokus på dette i opplæringen vil kunne styrke elevenes og lærningens kommunikasjon med pasienter og bidra til økt forståelse i pasientmøtene. I tillegg til flerkulturelle problemstillinger kan språkutfordringer også gjøre seg gjeldende i situasjoner som skyldes tilstand eller skade. Nok kunnskap til å ta valg er en av faktorene for å løse etiske dilemma best mulig (Nordby, 2014a). Når språket mangler eller er begrenset vil det skape utfordringer for ambulansesarbeideren med tanke på å innhente informasjon fra pasienten, og dermed velge riktig tiltak. En måte å få større innsikt på er å benytte øvingssituasjoner der elevene får kunnskap om, og trening i kommunikasjon med språkutfordringer som utgangspunkt.

Tilrettelegging for læring og kompetanseutvikling i ambulansesfag

Studien viser at utvikling av yrkesetisk kompetanse i utdanning av ambulansesarbeidere kan støttes gjennom tilrettelegging av ulike læringsaktiviteter. Det finnes ingen fasitsvar på etiske utfordringer. Å komme frem til gode handlingsvalg handler om å anvende personlig dømmekraft (Nordby, 2014a). Om elevene skal utvikle god dømmekraft i etiske situasjoner må undervisningen være realistisk slik at de kan dra nytte av det de lærer i yrkeslivet. Erfaring,

refleksjon og evne til å håndtere etiske utfordringer og dilemmaer i praksis er viktige elementer i utvikling av yrkesetisk kompetanse og må få fokus i opplæringen.

Rollespill der elevene trener på kommunikasjon med mennesker med psykisk sykdom eller rusutfordringer, gir erfaringer som elevene tar med seg inn i nye situasjoner. Slike øvingssituasjoner synliggjør betydningen av å integrere kommunikasjon og etikk i realistiske læringsaktiviteter. Lærlingene rapporterte at de lærte best når de ble utfordret til å ta beslutninger uten opplagte svar, og når de bevegde seg i grenselandet av egen komfortsone. Ifølge Aasland (2008) utvikles yrkesetisk kompetanse og dømmekraft når elevene konfronteres med egne verdier og holdninger og må ta valg i krevende etiske situasjoner.

Å øve ved å simulere autentiske situasjoner er en måte å skape et praksisfellesskap på som eleven kan kjenne igjen og hvor de deltar med felles mål. Refleksjon over egen praksis, både individuelt og i team, er viktig for utvikling av etisk kompetanse (Wihlborg, 2018).

Realistisk øving innebærer at også de små uforutsette tingene som skjer i dialog med et annet menneske får prege øvingen. Lærlingene så tilbake på denne måten å lære på som positivt, og fremhevet at refleksjonen i etterkant som viktig for læring. Systematisk refleksjon etter caseøvinger bidrar til å innarbeide rutiner for evaluering og bearbeiding, noe flere lærlinger mente var verdifullt for fremtidig yrkesutøvelse. Mye taler for at bearbeiding og evaluering må skje etter enhver simulert eller reell situasjon.

To av lærlingene sa at terpingen på systematikk i skoledelen hadde betydning for hvordan de handlet når de kom opp i vanskelige situasjoner. Ved å øve mer systematisk med vurdering og løsning av etiske utfordringer i pasientarbeid, øves også elevenes evne til å reflektere. Etisk vurdering starter med refleksjon (Nordby, 2014a). For å kunne vurdere etiske dilemmaer må læringen skje over tid og relateres til sammenhenger elevene kan identifisere til yrket. Gjennom å stille spørsmål både til egen forståelse og til handling kan det skapes ny forståelse og økt bevissthet (Lillemoen et al., 2025). Dette utfordrer også aktørene til å sette ord på tanker, erfaringer og egen kunnskap, og bidrar dermed til å utvikle et språk for egen etisk refleksjon slik vi ser det.

Refleksjonsmodeller brukes som metodeverktøy i ambulansefaget for å utvikle etisk kompetanse (Østebø et al., 2023). Mange av disse er imidlertid lite tilpasset prehospitale situasjoner med begrenset tid til refleksjon. Testene tar gjerne utgangspunkt i den enkeltes erfaringer, noe som kan være utfordrende for unge elever og lærlinger med liten erfaring i yrket. Det belyser betydningen av å bruke de systematisk slik at de testes opp mot nye erfaringer som elevene og lærlingene gjør seg i løpet av utdanningen. Øving med realistiske situasjoner gir nye erfaringer, og refleksjonen over disse kan styrke forståelse og bevissthet rundt etiske situasjoner (Lillemoen et al., 2025).

Ambulansearbeideres komplekse arbeidsoppgaver fordrer evne til etisk refleksjon. Å styrke elevenes og lærlingenes etiske bevissthet er også å styrke deres refleksjon over eget arbeid, som igjen kan bidra til å sikre kvalitet på helse-tjenestene (Magelssen & Pedersen, 2025). Det er ingen garanti for at et menneske handler etisk riktig selv om det har lært om etikk i sin utdanning, og det er heller ikke sagt at teoretisk kunnskap om etikk er nødvendig for å kunne gjøre gode etiske handlinger (Aasland, 2008). Studier viser likevel at pedagogiske tiltak over tid, med yrkesetisk fokus og vektlegging av diskusjoner rundt dilemma, har positiv effekt på etisk refleksjon og vurdering (Solbrekke, 2008). I denne studien finner vi unge mennesker som uttrykker omsorg, empati og evne til å reflektere over og håndtere komplekse arbeidsoppgaver. Det støtter behovet for fokus på opplæring som fremmer etisk refleksjon både når elevene er i skoledelen av utdanningen og i læretiden (Bremer & Holmberg, 2020).

Kompetanseutvikling skjer når praktisk undervisning, teori og refleksjon, gjennom handling, forståelse og følelser, integreres i en helhetlig læringsprosess (Hiim & Hippe, 2001). Yrkesfaglærerens evne til å relatere fagstoffet til reelle situasjoner, og etablere gode relasjoner, er viktig for utvikling av yrkesetisk kompetanse. Lærlingene i studien fremhevet at relasjonen til både lærere og veiledere bidro til trygghet i opplæringen.

Å bygge videre på elevenes eksisterende forståelse og erfaringer, samtidig som de utfordres er av betydning. Ettersom elevene har begrenset erfaring i prehospitale situasjoner, vil deres beslutninger i større grad basere seg på evne til å reflektere og bruke teori for å komme frem til handlingsalternativ. Da må de i skoledelen ha blitt presentert for teori og lært å bruke den. Samtidig viser studien at lærlingene til tross for ung alder bygger sine vurderinger på de erfaringer de har, som lærlingen som hadde mistet nære pårørende som barn og mente det gjorde han sterkere i møte med lignende opplevelser, eller han som kommenterte at "vi har jo alle opplevd noe."

Lærlingene uttrykte behov for å bearbeide utfordrende situasjoner og viste til at veilederen er sentral i dette. En lærling understreket eget ansvar for å søke hjelp, noe som kan vise en modenhet og evne til å vurdere egne ressurser. Dette kan også reflektere erfaring med refleksjon fra skoledelen av opplæringen. God veilederkompetanse og rutiner for *debriefing* kan støtte lærlingenes bearbeiding av situasjoner, og samtidig bidra til å forebygge det Magelssen og Pedersen (2025) omtaler som moralsk stress.

Lovverk regulerer mye av plikter og rettigheter i helsearbeid. Likevel trenger helsefagene yrkesetikken mer enn noen gang (Førde & Lillemoen, 2025). Å bli utfordret på hvilke verdier som er viktige for oss, gjør oss oppmerksom på hva vi selv mener og kan medvirke til at vi blir mer tolerante for ulike etiske oppfatninger (Miljeteig & Førde, 2025). Lærlingene verdsatte konkrete tilbakemeldinger fra lærerne. Yrkesfaglæreres respons og veiledning har betydning for

elevers selvtilit, erfaring og læring i øvingssituasjoner. Dette er overførbart til veiledning av lærlinger i bedrift og støttes av annen forskning på området (Hanssen et al., 2022). For at etikkundervisningen skal være relevant, må den knyttes til realistiske situasjoner lærlingene kan møte i praksisfeltet, og den må berøre og gi gjenkjenning i elevenes og lærlingenes holdninger og følelser slik også Aasland (2008) påpeker.

Koherens og kompetanseutvikling

Lærlingene uttrykker at undervisningen i skoledelen av utdanningen blir lettere å forstå når lærerne bruker erfaringer og reelle historier fra egne yrkesliv i ambulansen for å eksemplifisere teorien. Funnene støtter opp under at det er viktig med autentiske undervisningssituasjoner som setter elevene i stand til å se sammenhengene i faget, noe en rekke studier innenfor fag- og yrkesopplæring viser (se f.eks. Hanssen, 2024). For at situasjonene skal oppfattes autentiske, vil det være viktig å lage dem så lik praksisfeltets situasjoner som mulig. Dette støtter betydningen av at faglærerne er oppdatert på det yrket de skal undervise i og at samarbeidet mellom praksisfeltet og skolen er godt.

Utdanningsløpet i ambulansefag involverer både skolen og lærebedriften. Begge organisasjonene følger en helhetlig plan for opplæringen som skal bidra til å sikre programkoherens. Studien viser at lærlinger til tider opplever at skolen og lærebedriften ikke alltid snakker samme språk. Flere studier innenfor yrkesfag har lignende funn (Hanssen, 2024; Hiim, 2022; Aakernes, 2018). Dette viser behovet for et godt og formalisert samarbeid mellom organisasjonene.

I denne studien uttrykte lærlingene trygghet når rutiner de hadde øvd på i skolen var gjenkjennbare i praksis. Dette styrker lærlingenes opplevelse av overgangskoherens og bidrar til at opplæringen fremstår helhetlig. Lærlingene fortalte også at de bruker erfaringer fra en situasjon i møte med nye lignende situasjoner. Det øker forståelsen og bidrar til opplevelse av mestring og viser progresjon i læringsutbytte gjennom utdanningsløpet. Lærlingene omtaler opplæringen i skole som en *grunnmur* og *startkapital* som har stor betydning for dem i møte med læretiden. De opplever å ha opparbeidet seg noen grunnleggende forutsetninger som gjør de bedre i stand til å takle krevende situasjoner.

En av lærlingene peker også på at oppdragelse og tidligere erfaringer fra barndom og oppvekst har betydning for valg han gjør. Dette kan relateres til biografisk koherens (Heggen & Smedby, 2012). Å bygge på elevenes og lærlingenes erfaringer, både fra oppvekst og skolegang, bidrar til å skape meningsfulle sammenhenger (Hanssen & Utvær, 2022), noe studien viser har betydning for utvikling av yrkesetisk kompetanse i ambulansearbeid.

Studiens styrker og svakheter

En av studiens styrker er at temaet utvikling av yrkesetisk kompetanse i ambulansesfag på videregående nivå er lite belyst og er således et bidrag til fagfeltet. Når de som undervisningen tilrettelegges for forteller om hva som bidrar til deres kompetanseutvikling, øker troverdigheten av foreslåtte læringsaktiviteter. En svakhet er at elevperspektivet kommer til syne gjennom læringenenes retrospektive blikk. Intervjuene reflekterer hva intervjudeltagerne føler og mener på et gitt tidspunkt og i en bestemt kontekst. I tillegg til at folk glemmer er det et problem at de lett gjenkaller fortiden gjennom et filter av begreper og tenkemåter de har tilegnet seg på et senere tidspunkt (Repstad, 2007). Et design hvor elever i videregående skole er inkludert ville styrket troverdigheten av elevperspektivet i studien.

Konklusjon

Denne studien belyser hvilke yrkesetiske utfordringer læringer i ambulansesfag opplever, og hvordan yrkesetisk kompetanse kan styrkes gjennom utdanningsløpet. Funnene viser at læringene møter mennesker i svært krevende situasjoner i akutte prehospitale kontekster der etikk er sentralt. Det er viktig at de håndterer disse situasjonene best mulig både for enkeltaktørene og tjenesten som helhet. Læringene har fortalt om sine opplevelser rundt det å ta etiske valg, takle etisk vanskelige situasjoner relatert til språk og kultur, håndtere etiske dilemma og det å være kommunikasjonskompetent. Tross deres unge alder viser de ansvarsfølelse og besitter verdifull kompetanse som må synliggjøres, anerkjennes og brukes, både i videregående skole og i lærebedriften.

Videre tydeliggjør studien behovet for fokus på kommunikasjon og etikk i hele utdanningsløpet. Kompetanse utvikles ved øving på kommunikasjon i krevende situasjoner, når fokuset er med i all øving som innebærer pasientmøter og når simulerte eller andre praktiske situasjoner er så autentiske som mulig. Elever og læringer lærer best når de utfordres til handling og valg i vanskelige øvingssituasjoner, med påfølgende refleksjon innenfor en kontekst av trygghet.

Koherens kan fremmes gjennom å bruke praksisnære caser i skolen, hjelpe læringer i å ta i bruk tidligere ervervet kunnskap og erfaringer når de møter etiske utfordringer, og formalisere samarbeidet mellom organisasjonene. Studien underbygger viktigheten av å jobbe med utvikling av yrkesetisk kompetanse både i skoledelen av opplæringen og i læretiden.

Om forfatterne

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Between school and work: Vocational students' experiences of using digital multimodal logbooks as boundary objects

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Abstract

The aim of this study is to illuminate the way learning across workplace and school is shaped, by focusing on students' experiences of their teachers' efforts to work with subject-specific vocational knowledge at school. The study builds on theories of boundary crossing, and in this specific example, the students use a digital multimodal logbook as a boundary object connecting the two learning arenas school and workplace. Four teachers from an upper-secondary vocational programme and their 14 students were interviewed and a multilevel boundary crossing framework was used for the analyses. The results show that, compared to their teachers, the students understood the purpose of the digital logbook differently and did not see its connection to learning outcomes. When confronted with this purpose at the end of the interviews, the students presented their own ideas on developing the logbook. Most disagreements occurred at an interpersonal level, that is, teachers and students did not engage in enough discussion to understand each other's views. A conclusion drawn from this result is that a more fundamental discussion is needed between teachers and students on the purpose and use of logbooks in order to exploit their full potential.

Keywords: vocational students, vocational teachers, boundary objects, educational technology, boundary crossing



Introduction

In many vocational school systems, upper-secondary students are supposed to learn their vocations at both schools and workplaces. In fact, previous research has shown that this is a critical part of vocational education (e.g., Choy et al., 2018; Kyndt et al., 2021). However, many students have problems connecting what they learn at school to what they learn at workplaces, and vice versa, and experience what has been called a gap between these two learning arenas (Tuomi-Gröhn & Engeström, 2003). Moreover, students often have to struggle on their own to connect what they learn (e.g., Mårtensson, 2020). To bridge this gap – or gaps in the plural as Enochsson et al. (2020) claim – different kinds of *boundary objects* may be used (Akkerman & Bakker, 2011, Kilbrink et al., 2021; Tynjälä et al., 2016).

The concept *boundary object* was introduced by Star and Griesemer (1989). In their study, the boundary objects were physical artifacts. The concept has thereafter developed. Fox (2011) shows how also ideas about the artifact matters. Hence, a boundary object can, for example, be language, digital technology, or a combination of ideas and artifacts. Since teachers are responsible for providing boundary objects, our own previous research has focused on teachers' experiences of using digital technology as a boundary object for students in vocational education (Enochsson et al., 2020; Kilbrink et al., 2021). Cattaneo et al. (2021) as well as Riis and Brodersen (2021) have also demonstrated the educational possibilities of designing for integration and boundary crossing between learning arenas in vocational education by using digital technology as boundary objects. However, very little is as yet known about the relation between teachers' expectations and students' experiences of using digital technology to connect the two learning arenas – school and workplace – of vocational education.

In this study, teachers in an upper-secondary vocational programme tested a digital multimodal logbook in order to create a more complete learning experience for their students. The digital multimodal logbook functioned as a boundary object between school and workplaces. The logbook included assignments related to the learning outcomes, designed so that the students could use different modes – text, voice recordings, videos, etc. – to communicate what they had learnt and to enable interaction between them and their teachers. Thus, the logbooks allowed the vocational subject teachers to understand what learning content each student met at their workplace. The digital mode facilitated logging during the work-placement period, which made it possible for teachers to intervene if necessary.

The aim of this study is to illuminate the way learning across workplace and school is shaped, by focusing on students' experiences of their teachers' efforts to work with subject-specific vocational knowledge at school.

Previous research

To develop relevant vocational knowledge, students need to integrate knowledge from different learning arenas (Tynjälä, 2008; Tynjälä et al., 2021). One of the most central and recurring questions in vocational education is how such learning arenas can complement each other and form a cohesive whole in students' learning (e.g., Aprea et al., 2020; Baartman et al., 2018; Kyndt et al., 2021). Although the fact that the learning arenas are different holds potential, various studies have highlighted that students have difficulties seeing this coherent whole (Baartman et al., 2018; Mårtensson, 2020). Eiríksdóttir (2020), who studied recent vocational school graduates, found that they did not experience the programme as a coherent whole, due to a lack of systematic communication and collaboration between those responsible for the different learning arenas. Teachers and work-placement supervisors showed significant variations in their perspectives on the integration between learning arenas. Both groups had a more positive view of the arena they themselves represented, while former students thought both arenas important to their learning. Similar results were shown by de Vos et al. (2022), who studied workplace educators by observing them and following up with stimulated recall.

A well-known problem connected to this type of educational organisation is what is usually referred to as a gap between learning arenas and students' difficulties in integrating them (e.g., Baartman et al., 2018; Mårtensson, 2020). Some researchers use the metaphor of a boundary that has to be crossed in one way or another (e.g., Akkerman & Bakker, 2011; Akkerman & Bruining, 2016). Others use concepts such as transfer, transformation, integration, or contextualisation to describe the phenomenon of learning between these different arenas and highlight the associated problems that need to be addressed (e.g., Baartman et al., 2018; Kyndt et al., 2021; Tuomi-Gröhn & Engeström, 2003). Akkerman and Bakker (2011) define these boundaries as sociocultural differences leading to discontinuities in action and interaction. Irrespective of the concepts used, the gaps or boundaries are not always explicit. The gaps vary in type: from concrete gaps, like geographical distances, to more abstract gaps, like pedagogical gaps due to different views of education (Enochsson et al., 2020; Kilbrink et al., 2020).

Regardless of the concepts used, the problem remains that students often find it complicated to bridge the gap or cross the boundaries, and thereby integrate knowledge from the different learning arenas (e.g., Choy et al., 2018). Berner (2010) calls this *boundary-work* and distinguishes two main types: reaffirmation, when boundaries are accentuated, and reconstruction, which instead involves blurring the boundaries. These differing attitudes to boundary-work lead to various methods, although they similarly aim to help students overcome the boundary – or gap – and to integrate what they learn in different arenas. Billett (2018) promotes the thorough preparation of students before work-placement

periods. This preparation should for example include information about purposes, clarification of expectations, as well as preparing the students to be agentic and able to contest what they see. Follow-up is as important, and may include facilitating the sharing of experiences, explicitly linking to what is learnt at school and workplaces, respectively, as well as generating a critical perspective on work and learning processes.

However, communication between teachers and supervisors at workplaces is important in creating a complete learning experience across learning arenas (e.g., Choy & Sappa, 2016; Kilbrink, 2013; Mazereeuw et al., 2018; Tynjälä, 2008). Choy et al. (2018) draw the conclusion that there must also be pedagogical – or as they write ‘teacherly’ – interventions if different learning arenas are to be integrated. They claim that ‘integration needs to be problematised in a reflective way to understand the challenges with arranging rich learning opportunities for students’ (p. xvii). Similar conclusions are drawn by Aarkrog (2005), Baartman et al. (2018), and Berner (2010) when claiming that conditions need to be created for learning where school and work can complement each other and contribute to both broadening and deepening students’ learning. It is also important to support the students in applying their knowledge in new contexts in a changing world (Kilbrink, 2013; van der Baan, 2024). An important factor for integrating knowledge from both learning arenas and developing relevant vocational knowledge is creating conditions that facilitate the learners’ reflection (Almalki, 2020; Ulvik et al., 2018; van der Baan, 2024).

Digital technology has been found useful as boundary objects (Aprea et al., 2020; Cattaneo et al., 2021; Kyndt et al., 2021; Riis & Brodersen, 2021), meaning that the technology in different ways can help students to bridge the gap between learning arenas. However, such bridging does not happen automatically (Enochsson et al., 2020; Kilbrink et al., 2021). Boundary objects have to be used with a clear purpose. With deliberate use, conditions for reflection can be created, for example, through logbooks or other multimodal documentation. Thus, the way in which the teacher chooses to use digital technology is significant (Cattaneo et al., 2021). Furthermore, teachers and supervisors may have divergent views on learning or service production, which could also lead to discontinuities (Bouw et al., 2021; Khaled et al., 2021; Sappa et al., 2021). Not only is there a lack of research focused on digital technology as a support for reflection in this context, but also of studies examining this phenomenon from multiple perspectives – those of teachers, students, and supervisors.

Based on the body of research presented above, we need more in-depth studies to fully understand in what ways digital technology can be used as boundary objects in vocational education as well as if – and in what ways – students’ experiences meet their teachers’ expectations of the digital multimodal logbook. As stated above, the aim of this study is to illuminate the way learning across

workplace and school is shaped, by focusing on students' experiences of their teachers' efforts to work with subject-specific vocational knowledge at school. A two-fold research question is central to the analysis:

What do the vocational subject teachers expect to achieve by using the multimodal logbook at school and workplaces, and how do students experience connecting school and workplaces by using the multimodal logbook?

The question allows us to analyse if – and in what ways – students' experiences meet their teachers' expectations.

Theoretical framework

This study draws on theories of boundary crossing, where boundaries are defined as 'sociocultural differences between practices leading to discontinuities in action or interaction' (Akkerman & Bruining, 2016, p. 243). Hence, in our study, the view of learning is rooted in a perspective that regards learning as the result of interaction with the environment – people or things – with or without artifacts. The important artifacts in the present study are for example digital tools and multimodal language.

In vocational education where students do periods of work placement, they work on the boundary between these different learning arenas and try to connect what they learn from both of them. They do this by using different kinds of artifacts, here also seen as boundary objects, of which digital technology can be one – as a complement to language which is also seen as a boundary object (Akkerman & Bakker, 2011). In a review of 181 studies, Akkerman and Bakker defined four different *dialogical learning mechanisms* of boundary crossing: identification, coordination, reflection, and transformation. While identification may be seen as a prerequisite for boundary-work, the other three mechanisms have been found to occur in a hierarchical order (Enochsson et al., 2020). In addition, teachers' pedagogical aims are qualitatively different depending on the learning mechanism and the most developed form, transformation, is less common than the others (Kilbrink et al., 2021; van der Baan, 2024). From dialogical learning mechanisms identified in the review (Akkerman & Bakker, 2011), Akkerman and Bruining (2016) developed a multilevel boundary crossing framework, showing that learning mechanisms can occur at three different levels (Figure 1). At the intrapersonal level, a person participates in two or more practices; at the interpersonal level, action and interaction occur between actors from different practices; and at the institutional level, action and interaction occur between organisations or organisational units.

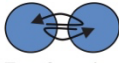
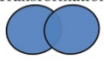
Multilevel Boundary Crossing Framework			
Learning Mechanism	At the Institutional Level (Action and Interaction Between Organizations or Organizational Units)	At the Interpersonal Level (Action and Interaction Between Actors From Different [Institutionalized] Practices)	At the Intrapersonal Level (Participation of a Person in Two or More [Institutionalized] Practices)
Identification	Organizations or units come to (re)define their different and complementary nature.	People come to (re)define their different and complementary roles and tasks.	A person comes to define his or her own simultaneous but distinctive participatory positions.
			
Coordination	Organizations or units seek means or procedures for institutional exchange and cooperation.	People seek shared means or procedures for exchange and cooperative work.	A person seeks means or procedures to distribute or align his or her own participatory positions in multiple practices.
			
Reflection	Organizations or units come to value and take up another's perspective to look at their own practice.	People come to value and take up another's perspective.	A person comes to look differently at his or her own participatory position because of the other participatory position.
			
Transformation	Units face a shared problem space and start collaborative work or merge institutionally.	People face a shared problem, start collaborative work, and may build group identity.	A person develops a hybridized position in which previously distinctive ways of thinking, doing, communicating, and feeling are integrated.
			

Figure 1. The multilevel boundary crossing framework (Akkerman & Bruining, 2016, p. 246).

The multilevel boundary crossing framework holds the potential to give a nuanced view of students' learning when moving between learning practices during their vocational education. In the present study, we analyse what the vocational subject teachers expect to achieve by using the multimodal logbook at school and workplaces, as well as students' experiences connecting school and workplaces by using the multimodal logbook. By using the multilevel boundary crossing framework we thereafter analyse students' experiences in relation to their teachers' expectations of the logbook to make possible discontinuities visible. Hence the theoretical framework allow us to analyse if – and in what ways – students' experiences meet their teachers' expectations.

Method

This case study focuses on an upper-secondary vocational programme on animal care in Sweden. Students were selected because they had used digital logbooks in order to bridge the gap between school and workplaces. The logbook comprised three assignments: (1) recording a video showing daily routines at the work placement; (2) using photos and words to show how the workplace promotes enrichment of the animals' environment; and (3) recording a podcast in which the animals' outdoor environment is described. The assignments in the logbook were created in collaboration with the research group to relate to the course content. The teachers as well as the students were trained specifically in the use of the digital tools.

We selected four teachers from this vocational programme to participate in the study. Due to the Covid-19 pandemic, access to the school was restricted and the researchers could not follow the project *in situ*. The teachers were therefore interviewed individually via a video conferencing system (teacher interviews 1–4). After the students' last work-placement period had ended and the school had opened up again, fourteen students from one of their classes were interviewed groupwise (in six groups) about their experiences (student interviews 1–6). These interviews were conducted in a classroom at their school. Two teachers as well as the principal who had approved the project were no longer working at the school at this time, and a follow-up interview was conducted with the two remaining teachers (teacher interview 5). All interviews were sound-recorded (totalling 6:12:31 of material).

The interviews focused on the students' and teachers' intentions with using the logbooks from their respective perspectives. The questions concerned three topics: (1) the general aim as well as details of the assignments; (2) doing the assignments – their content and the use of digital tools; (3) feedback and assessment. The questions were kept as open as possible to allow participants to mention aspects relevant to them, but also to include topics the researchers had not considered.

Ethical considerations

The study follows the ethical recommendations of the Swedish Research Council (2024) and has undergone a local ethical review in accordance with guidelines at Karlstad University (2023). Participating teachers and students (all over the age of 18) were informed orally and in writing about the aim of the study and that participation was voluntarily. All informants have signed a written consent. For ethical reasons, the names of the participants or the school are not mentioned.

Analyses

Transcripts of the interviews were analysed in several steps. First, a reflexive thematic analysis was conducted, following Braun and Clarke (2006, 2021), and trying to be as open-minded as possible to the data. Accordingly, the data were thoroughly worked through by generating codes and generating initial themes (Braun & Clarke, 2021). Second, the identified themes were organised around the same three topics as the questions. Third, within each topic the themes were reviewed and analysed based on the multilevel boundary crossing framework described above (Akkerman & Bruining, 2016). As a fourth step, to understand their respective views, statements from the teachers and the students were analysed at each level and the themes were defined and named (Braun & Clarke, 2006, 2021). In order to answer the two-fold research question, focus was on agreements and disagreements between the teachers and the students. The result

highlights their different understandings and shows at which level of the multilevel boundary crossing framework the discontinuities occurred within each topic.

Findings

The findings are organised around the three topics: (1) the assignments in general, (2) doing the assignments, and (3) feedback and assessment. Each topic shows what teachers and students talked about and highlights disagreements between the two groups as well as the level at which these disagreements occurred. Quotes are labelled with 'teacher interview 1–5' and 'student interview 1–6' to highlight the different groups. The multilevel boundary crossing analysis showed that most of the discussions concerned the dialogical learning mechanism *reflection*, but at different levels: the intrapersonal, interpersonal, and institutional levels. In general, the intrapersonal level was not much mentioned.

The assignments

The teachers saw the role of the assignments as promoting learning through reflection and helping students to develop their self-assessment. They noticed that students used more trade expressions and included more details than before in their descriptions. The teachers reported considering the logbook as a way to connect theory and practice, and saw the assignment as a meaningful activity to occupy students when they did not know what to do. Teachers regarded downtime (Swedish *dötid*, literally 'dead time') as a general problem during work placements.

In general, the students were positive to the assignments; they appreciated the freedom of the video format and gave examples of how they completed the assignments. Some of them used advanced video applications to cut footage and add music. Some preferred not to talk themselves and used subtitles for descriptions, sometimes accompanied by video and sometimes with still pictures added to a film. Even if they liked the format, they were not aware of the aim of the assignment. Contrary to the teachers, the students did not report experiencing downtime. They regarded finding the time to do the assignments as a bigger problem. Work-placement supervisors were not always aware of the assignment, and using mobile phones was not always seen in a positive light, regardless of the purpose.

When comparing what the teachers and the students reported, we identified disagreements within some of the themes, which are presented in Table 1. These disagreements were mostly between the teachers and the students, but the work-placement supervisors were also indirectly involved. The teachers had the idea that the assignments could be an activity to occupy students when they had

nothing to do. The students' view was that they were overloaded with work and had difficulty finding the time to do the assignments. When they did find time to do the assignments, their work-placement supervisors were unhappy, because they were unaware of the assignments. An example is shown in the quotes below (the excerpts are from different interviews):

Teacher: Sometimes it can be difficult to find work tasks when there's a bit of downtime, 'Ok, then it fits that you sit down with the assignment now because now you can't be with us for 30 minutes.' (Teacher interview 3)

Student: Information [about the assignments] should go to the workplace as well. That they know about it. Because then I think everything would be easier. Then you would have time to write and film and so on. Then they can plan which day you can do it. But it's really that I think almost all assignments would work as long as you get time to do it. (Student interview 1)

While the teachers saw the logbook as a way to connect theory and practice and to reflect on this connection, the students did not understand the teachers' aim in this respect. The students saw more practical aims in connection to assessment, that is, how to carry out specific tasks. The disagreements noted here were at the interpersonal level and also involved the work-placement supervisors. The teachers tended not to regard work placements as learning environments for content, and instead thought this could be handled at school with the available animals. The students on the other hand wanted to show what they had learnt during their work placements.

Table 1. Topic 1: The assignments.

Themes regarding the logbook assignments in general, from interviews with teachers and students, respectively. (Disagreements marked in bold and italics)	
Teachers	Students
• Learning through reflection • Students' self-assessment	• Generally positive to the assignments
• Students used more trade expressions and noticed more details	• Appreciated the freedom of video format
• <i>A way to connect theory and practice</i>	• <i>Unclear aim</i>
• <i>A meaningful activity when students have downtime</i>	• <i>Difficulties finding the time to do the assignments</i> • <i>Supervisors not always aware</i> • <i>Workplace culture could pose a problem</i>

Doing the assignments

When discussing doing the assignment, the teachers claimed that students had difficulties handling the technology. They wanted to be able to prepare the students better, for example by offering training in using the technology, meaning they did not want the students to face any problems.

The students did not see technology as their greatest problem; rather, it was that the work-placement supervisors had not been prepared and were unaware that students were going to make videos. This group had to finish their videos during the first week of their three-week work placement, which they did. However, if the deadline had been more flexible and the supervisors had been aware of the assignment, the students could have planned to make videos showing specific actions or work. When presenting the videos to the teachers, some of the students uploaded the videos directly on the course platform and others used free online services for uploading, since it was easier to upload large files somewhere else, and posted a link on the course platform. An example of different views is shown in the excerpts below:

Teacher: I think it's a little different for different students, that for some it's been the technology and for some it's been the way of working... they have a little more trouble with the technology and with the digital stuff. (Teacher interview 1)

Student A: We filmed with the phone and then we edited it on iMovie.

Interviewer: Did you have any start-up lesson – before you went to the workplace – where you practised this filming and...?

Student B: No, no. We just got this: 'Well now you're going out to the animals and like... practise [filming]'. (Student interview 2)

Within this topic there were disagreements regarding all themes (Table 2). Like the earlier disagreements, these also occurred at the interpersonal level showing a lack of communication. The teachers and the students had relaxed relations, but the students nevertheless did not take any initiative to express their needs regarding technology use, and their teachers did not ask.

Table 2. Topic 2: Carrying out the assignments.

Themes regarding doing the assignments, from interviews with teachers and students, respectively. (Disagreements marked in bold and italics)	
Teachers	Students
• <i>Students unable to handle technology well enough</i>	• <i>No problems making the videos</i>
• <i>Difficulties to prepare the students</i>	• <i>Students reported that work-placement supervisors were unprepared</i>

Feedback and assessment

Feedback and assessment were very important to the teachers. They thought they had a better basis for assessing students through the assignments. They also appreciated getting glimpses throughout the work-placement period, which does not always happen otherwise. Receiving this information during the work-placement period made it possible to intervene early if there was a problem. However, the teachers claimed that the students did not always care about the feedback they received. According to the teachers, the students shared experiences when they were back in school to conclude the work-placement periods.

The students agreed on the importance of the assignments regarding assessment. The assignments enabled them to give *their* view of what they were doing, and the grades they received did not only depend on their work-placement supervisors' reports. This was even more important if they did not get along with the supervisor. Although this did not seem to occur often, they all knew of such cases and regarded it as a potential risk that could happen any of them. Students reported that they expected greater contact with the teachers and wanted more discussions when back in school.

Table 3. Topic 3: Feedback and assessment.

Themes regarding feedback and assessment, from interviews with teachers and students, respectively. (Disagreements marked in bold and italics)	
Teachers	Students
Assessment became more secure	The logbook could present the teacher with a more complete picture of what they had been doing
- Glimpses throughout the work-placement period, which are usually impossible to get - Possible to intervene early if things do not work	The logbook could become very important if somebody does not get along with the supervisor
<i>Students did not always care about the feedback given</i>	<i>Students expressed expecting greater contact with the teacher</i>
<i>Students shared experiences when back in school</i>	<i>Students wanted more discussions when back in school</i>

On this topic, the teachers' views of feedback clearly disagreed with those of the students, which are presented in Table 3 and in the following excerpts:

Teacher B: There were incredibly good reflection discussions after the work-placement period when we simply sat with the course syllabi and videos and the other assignments. (Teacher interview B)

Interviewer: Did you discuss these films when you came back to school?

Student 4: I don't remember....no I don't think we did.

[...]

Interviewer: You didn't watch each other's films either?

Student 4: No [...] it would have been fun to hear what others did and so, but we never did that. (Student interview 4)

This may be regarded as a misunderstanding between the teachers and the students and hence a disagreement at the interpersonal level, but in the follow-up interview with the teachers, they claimed that a lack of time is part of the problem. Therefore it should be seen as a disagreement at the institutional level. The teachers did not regard this as something they could influence.

Summary

The results show that the students understood the aim of the digital logbook differently than their teachers did, and they did not see the connection to learning outcomes. When confronted with this aim at the end of the interviews, the students presented their own ideas on developing the logbook. Most disagreements occurred at the interpersonal level, that is, teachers and students did not engage in enough discussion to understand each other's views. Some disagreements occurred at the institutional level, that is, according to the teachers some problems could be solved, if only they could set aside more time for such discussions with their students. No disagreements at the intrapersonal level were noted, but while the teachers regarded the logbook as a tool for learning through reflection, the students did not mention the learning potential of the logbook.

Discussion

The findings of this study show many similarities to previous research. Like Eiríksdóttir (2020), we found that teachers and students have different views. They do not always agree on what the problem is, that is, they identify different gaps or boundaries (Enochsson et al., 2020; Kilbrink et al., 2020), which can lead to experiences of discontinuity. While the teachers for example regarded the technology as too complicated for students, the students did not see technology as a problem at all.

The teachers participating in this study wanted to prepare their students and discuss the work placement more in advance. The students also wanted more discussions in advance, but further wanted to share experiences when returning from their work placements. Billett (2018) also regards this as part of essential

preparation, but for some reason it did not seem to work as intended in the case studied here. The students also thought their supervisors should be involved and better prepared for what their teachers expected from them. So what was the problem? At first glance, it seemed as if all problems could be resolved by teachers and students talking to each other, which is also something both groups said they wanted. Discussion is certainly an important activity.

A conclusion is that even if the teachers and the students enjoy a good relation at a personal level, they do not meet to discuss education and learning. The final interview with the teachers revealed more. The teachers claimed to have insufficient time to do what they thought was necessary. Wärvik and Lindberg (2018) have shown that less time has been allocated for such work in the Swedish school system over the years. This project had been initiated by a former school principal, and the new one did not give it the same priority. Staff changes provide a partial explanation for the disagreements between teachers' aims and students' experiences.

Previous research has found that teachers choose different digital tools depending on their pedagogical aims (e.g., Akkerman & Bakker, 2011; Kilbrink et al., 2021), but a study on student teachers – who were less experienced – found that they had difficulties matching their pedagogical aims with suitable digital tools (Andersén et al., 2021). The tool they chose did not always serve their pedagogical purpose and sometimes complicated their work. As the teachers in our present study were still new to teaching, they might not yet have fully understood how to utilise the full potential of the logbooks.

When analysing this study's data using the multilevel boundary crossing framework (Akkerman & Bruining, 2016), another explanation was found as to why students and teachers did not fully understand each other. Regarding the use of digital technology as boundary object to connect learning at school with learning at the workplace, the teachers mainly aimed at coordination. At the same time, they also wanted the students to reflect, and they indicated seeing the logbook as a way to connect theory and practice. The student interviews showed that they only saw the logbook as precisely coordination, which to them meant showing how they achieve learning outcomes. This points at the importance of the teachers taking an active role (see Choy et al., 2018). As is shown in the results, the work-placement supervisors were not always aware of the students' assignments. It is clear that the teachers had pedagogical goals (see Choy et al., 2018), but they also think students can learn the trade itself with the animals at school. This material therefore gives rise to questions on the work-placement supervisors' role. It is unclear whether they are really part of the vocational programme, or if they are considered to be mere caretakers for some weeks. Maybe the vital communication between teachers and supervisors, highlighted in previous research (e.g., Choy & Sappa, 2016; Kilbrink, 2013; Tynjälä, 2008), also

needs to concern the assignments the students are expected to do, as well as the way in which they are expected to complete them, for example by using a mobile phone to take pictures for a logbook. Then all actors could work together as a team concerning the students' education.

Since this is a single case study, no general claims can be made. In addition to the study's limited scope, the Covid-19 pandemic introduced unforeseen challenges that disrupted the original research design, which had included observational components. Nevertheless, the multilevel boundary crossing framework allows a nuanced analysis of students' learning when moving between learning arenas in their vocational education by highlighting the disagreements, which also may be seen as 'weak points' in the system leading to experiences of discontinuity. The results point to several issues related to the interpersonal level, that is, teachers and students do not communicate about their expectations, but take some things for granted. Teachers organise talks and explanations about the work placements, but it seems they do not follow up and check that students have really understood. One highlighted issue is that the teachers claimed there is a lack of time to do this, which is an issue at the institutional level, but it is important to analyse how to best use extra time when any is allocated. The results seem to indicate that more time should be used to deepen the discussions rather than to add more content.

Conclusions

The results from this study are relevant for understanding how learning across workplace and school is shaped. Based on vocational students' experiences from using digital multimodal logbooks, our results show that such boundary objects can contribute to teaching and learning in vocational education which take place in two different learning arenas. The results of this study highlight the perspectival differences between teachers and students, which can lead to students' experiencing discontinuity in their education. Work-placement supervisors also need to be included in the aims of workplace assignments. Students are given access to a boundary object with the aim of connecting learning in the two arenas. However, teachers and students must discuss the purpose and use of the logbooks in order to exploit their full potential. More studies are needed to widen the knowledge base and to view the field from different perspectives.

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”Man är där, men du är osynlig kan man säga”: Vuxna utrikesfödda vårdelevers möten med äldreomsorgens olika normer och värderingar

”You are there, but you are invisible, one might say”:
Adult foreign-born care providers’ encounters with the different
norms and values in elderly care settings

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Abstract

This article aims to highlight and critically examine the norms and values encountered by adult foreign-born students in health and social care education during internships in elderly care settings. Despite political strategies to integrate foreign-born individuals into the elderly care workforce, research on this group of vocational students remains limited. Using focus group interviews, adult foreign-born students in health and social care education were interviewed. The findings reveal that the students primarily become aware of the norms in elderly care through observing their supervisors’ actions. These observations help make abstract concepts – such as delivering quality care and promoting independence – more tangible and applicable in practice. The personal values of the staff and care recipients emerge when the students face xenophobia. The students recognise having an education as essential for acceptance within the community of practice of elderly care and in society. However, their values sometimes conflict with the norms of the community of practice, particularly due to their deep respect for the elderly care recipients.

Keywords: norms, values, health and social care education, adult education, immigrants, elderly care



Inledning

Sveriges vanligaste yrke är undersköterska, och av dem arbetar cirka 75 procent inom äldreomsorgen (Statistiska centralbyrån [SCB], 2024). Sveriges åldrande befolkning har ett stort behov av vård och omsorg vilket leder till en hög efterfrågan på personal – främst undersköterskor och vårdbiträden – inom äldreomsorgen (Sveriges Kommuner och Regioner [SKR], 2024). En politisk strategi har därför utformats för att integrera utrikesfödda, både med och utan utbildning, som personal i äldreomsorgen för att möta det stora personalbehovet (Statens offentliga utredningar [SOU], 2017). Detta återspeglas även på Vård- och omsorgsutbildningarna (VO) inom den kommunala vuxenutbildningen (komvux), som har en heterogen elevgrupp gällande ålder, kön, utbildningsnivå och födelseland (Skolverket, 2024e). Ett av vuxenutbildningens mål är att stärka elevernas position på arbetsmarknaden (Skollag, 2010), vilket konkretiseras genom yrkesutbildningarna.

Historiskt sett har Sverige under en lång tid tagit emot flyktingar som succesivt har integrerats på arbetsmarknaden. Trots det finns det idag begränsat med forskning som fokuserar på just utrikesfödda yrkeselever (Mikander m.fl., 2018). Den största yrkesutbildningen på komvux är just VO (Skolverket, 2024e), och efter genomgången utbildning ska eleverna, förutom att klara av förekommande arbetsuppgifter inom vård och omsorg, också kunna ta till sig och förmedla information på svenska (Hultqvist & Hollertz, 2021). De förväntas även hantera konflikter med omsorgstagare med demenssjukdom (Jansson & Majlesi, 2020) samt arbeta i enlighet med svensk äldreomsorgs normer och värderingar (Elmeroth, 2018). I denna artikel definieras normer som både uttalade och outtalade regler och lagar som alla förväntas följa, medan värderingar avser personens egna ideal (Bang, 1999). Det kan framstå som stora krav på utrikesfödda elever att tillägna sig både ett nytt språk och ett nytt yrke samt nya normer och värderingar, vilket gör det relevant att fokusera på denna elevgrupp och undersöka vilka normer och värderingar som de möter i äldreomsorgen. Genom att tillämpa teorin om situerat lärande ämnar denna artikel bidra med förståelse för hur yrkeselevers lärande sker av existerande och förgivettagna normer och värderingar inom praktiklandskapet äldreomsorg.

Syfte och frågeställningar

Syftet med artikeln är närmare bestämt att belysa och problematisera vilka normer och värderingar som framträder för vuxna utrikesfödda elever på olika vård- och omsorgsutbildningar under praktiktiden inom praktiklandskapet äldreomsorg.

Frågeställningar

1. Vilka normer och värderingar har eleverna med sig in i den nya praktikgemenskapen?
2. Vilka normer och värderingar synliggörs för eleverna när de deltar i en praktikgemenskap i äldreomsorgen?
3. Hur synliggörs normer och värderingar för eleverna under deras deltagande i praktikgemenskapen?

Bakgrund och tidigare forskning

I detta avsnitt definieras först de centrala begreppen normer och värderingar. Därefter följer en beskrivning av det praktiklandskap som eleverna befinner sig i – både inom utbildning och äldreomsorg – med stöd i styrdokument och tidigare forskning.

Definition av begrepp

Normer definieras olika beroende på både kontext och författare. Normer kan vara skrivna lagar och regler (Bicchieri m.fl., 2023) som till exempel den svenska skolplikten: alla barn har laglig rätt att gå i skolan från sex års ålder (Skollag, 2010). De kan också beskrivas som det praktikgemenskapens deltagare förväntar sig av varandra (Young, 2015) eller praktikgemenskapens informella (Bicchieri m.fl., 2023) och ibland osynliga regler (Farrow m.fl., 2017), som upprätthålls genom socialt gillande eller ogillande (Elster, 1989). Det innebär att det är lättare att följa än att bryta mot normer (Somerville & Abrahamsson, 2003), eftersom normbrott skapar friktion i sociala relationer (Martinsson & Reimers, 2008). En osynlig norm på svenska arbetsplatser är till exempel att alla diskar sin egen kaffekopp (Fejes, 2019) och när det inte sker uppstår en friktion mot omgivningen med irritation som följd.

För att förstå och anpassa sig till en ny praktikgemenskap behöver individen uppmärksamma dess specifika normer, vilket sker genom både observation och i jämförelse med tidigare erfarenheter och känd uppväxtkultur. Om denna tolkningshjälp saknas ökar risken för missförstånd av den nya kulturen. En förutsättning för att kunna ta till sig nya normer är att individens tidigare kända normer från olika kulturer och sammanhang synliggörs (Zielinska, 2019). Normerna påverkar således individen som vill passa in och bli accepterad och undvika ogillande (Cialdini, 2007).

Värderingar definieras som ideal och målsättningar som både påverkar individens beslutsfattande och sociala relationer samt fungerar som vägledande principer vid val mellan olika alternativ (Bang, 1999). Det kan vara svårt att upptäcka och förstå andra personers värderingar och hur de ska respekteras i praktiken, framför allt om de är i strid med individens egen uppfattning (Hjerm

m.fl., 2020). Personliga värderingar anses vara stabila över tid, men kan under processen att förstå och ta till sig en ny kultur och dess värderingar skifta och bli antingen mer liberala eller mer konservativa (Zielinska, 2019). En finsk longitudinell studie visade dock att immigranter initialt anpassar sina värderingar till det nya landets värderingar (Lönnqvist m.fl., 2011), men att de senare tenderar att återgå till sina ursprungliga värderingar (Lönnqvist m.fl., 2013).

Ett tredje, men inte bärande, begrepp i denna artikel är värdegrund, alltså gemensamma värderingar som landets invånare förväntas följa och anamma (Bang, 1999) och i förlängningen implementera som samhällets normer i stort. Exempel på svensk värdegrund är demokrati, människors lika värde och jämställdhet, vilket framkommer i olika lagtexter (Hälso- och sjukvårdslag [HSL], 2017; Skollag, 2010; Socialtjänstlagen [SoL], 2001).

En jämförelse har gjorts av olika länders läroplaner som visar att mänskliga rättigheter är ett genomgående begrepp i alla jämförda läroplaner, till skillnad från jämlikhet mellan könen som inte alls ges samma utrymme (Sporre, 2020). Detta kan indikera att olika skolbakgrund samt kulturella aspekter kan påverka elevernas värderingar.

Vuxenutbildningens praktiklandskap

Ett av den svenska vuxenutbildningens uppdrag är att fungera som både regional och nationell kompetensförsörjare till arbetslivet (Skollag, 2010), där ett konkret exempel är just bristen på personal i äldreomsorgen (SKR, 2024) som har lett till satsningar på olika VO-utbildningar. Komvux erbjuder så kallade *yrkespaket* (Skolverket, 2024a), vilka motsvarar gymnasiets yrkesprogram (Skolverket, 2024b), men utan de gymnasiegemensamma, allmänna ämnena. Vård- och omsorgspaketet är störst sett till antal elever och omfattar 75 veckors studier, varav elva är arbetsplatsförlagt lärande (APL). Komvux erbjuder också en vårdbiträdesutbildning som motsvarar de första kurserna i undersköterskeutbildningen, med möjligheten att kunna fortsätta undersköterskeutbildningen vid ett senare tillfälle (Skolverket, 2024c). Den sistnämnda har högre språkkrav jämfört med vårdbiträdesutbildningen (Skolverket, 2024c) med ett komplext yrkesspråk i de senare kurserna, vilket gör att utrikesfödda elever riskerar att inte klara av dessa (Paul, 2023). Vårdbiträdesutbildningen kombineras emellertid ofta med extra yrkessvenska och/eller parallell praktik inom äldreomsorgen (Skolverket, 2024d) för att underlätta både språk- och yrkesinläring. VO-utbildningen syftar till att ge eleverna kunskap om och en helhetssyn på omsorgstagaren för att kunna hjälpa denne med exempelvis personlig vård. Kraven fördjupas för undersköterskorna som även ska kunna utföra bland annat olika provtagningar (Skolverket, 2024c). VO-lärarna har ett egenansvar att vara uppdaterade i vad som gäller både inom vård och omsorg och inom utbildningen

(Lundberg, 2019) eftersom de själva ansvarar för sin undervisning (Skollag, 2010).

Yrkesutbildningar framställs som en genväg in på svensk arbetsmarknad (Henning Loeb, 2019), och den politiska strategin är att se utrikesfödda individer som arbetskraft inom äldreomsorgen (SOU 2017:21), vilket avspeglar sig på utbildningsområdet där cirka 60 procent av vuxeneleverna är utrikesfödda (Skolverket, 2024e). Många elever påbörjar emellertid en VO-utbildning med syftet att snabbt etablera sig på arbetsmarknaden och inte utifrån ett direkt intresse för yrket (Karlsson m.fl., 2022). Utrikesfödda elever möter emellertid flera utmaningar (Rosvall m.fl., 2018) eftersom de, i kontrast till elever med svenska som modersmål, parallellt behöver tillägna sig både språk och yrkesspråk (Kindenberg & Nygård Larsson, 2016) samt lokal dialekt (Khor m.fl., 2024). Eleverna är dessutom tvungna att navigera bland nya normer och värderingar (Bang, 1999) som inte alltid är uttalade.

Undersköterskans viktigaste verktyg i mötet med kollegor och omsorgstagare är språket och att kunna kommunicera (Khor m.fl., 2024; Lagercrantz All, 2017). Därför krävs det att eleverna behärskar både yrkes- och vardagssvenska, eftersom språk och kunskap är varandras förutsättningar. Eleverna möter många nya yrkesord, både konkreta och abstrakta, där de sistnämnda är svårare att ta till sig. Det kan vara skamfyllt för eleverna att behöva visa sina språkbrister, men om de inte vågar göra det riskerar missförstånd att uppstå (Hultqvist & Hollertz, 2021), vilket kan leda till allvarliga konsekvenser för omsorgstagaren. När eleverna behärskar språket stärks deras självförtroende och det hjälper dem också att bli en naturlig del av arbetsgemenskapen. En norsk studie visade att otillräckliga språkkunskaper innebär att eleverna riskerar att utsättas för sämre behandling och främlingsfientlighet från både omsorgstagare och kollegor samt att få fler arbetsuppgifter (Khor m.fl., 2024). En amerikansk studie visade att personal som utsätts för diskriminering också påverkas emotionellt, vilket i förlängningen riskerar att inverka negativt på deras bemötandet av omsorgstagarna (Cottingham m.fl., 2018).

Ytterligare en aspekt som försvårar utbildningen för utrikesfödda elever är bristande kunskap om det svenska samhällets historia och kontext (Eliasson & Rehn, 2017). VO-utbildningens utgångspunkt är att eleverna redan känner till svensk kultur och att eleverna ska få kännedom om andra kulturer. Det är den enskilde läraren som ansvarar för hur detta behandlas i undervisningen, vars centrala innehåll innehåller historiska perspektiv på svensk social omsorg. Dessa kunskaper är dock inte ett formellt krav i arbetslivet (Kindevåg & Andersson, 2024). En historisk förståelse kan dock vara avgörande för att kunna tolka och delta i praktikgemenskapens normer och värderingar (Fejes, 2019).

Äldreomsorgens praktiklandskap

Svensk äldreomsorg bygger på principen om behovsstyrd hjälp, där omsorgstagarens individuella behov avgör insatsernas omfattning, oavsett bakgrund. Socialtjänstlagen (SoL) reglerar kommunernas ansvar att organisera bland annat äldreomsorgen utifrån lokala förutsättningar, vilket inkluderar både hemtjänst och särskilda boenden. Omsorgstagaren kan ha tillgång till hemtjänst dygnet runt, men vid stora vård- och omsorgsbehov, som exempelvis vid demenssjukdom, finns särskilda boenden med närhet till personal dygnet runt (SoL, 2001). Eleverna som intervjuats i denna studie har praktik/arbetar i olika delar av äldreomsorgens praktiklandskap.

I Sverige finns det sedan drygt ett decennium tillbaka en värdegrund för äldreomsorgen som bygger på SoL, där begrepp som till exempel självbestämmande, trygghet, gott bemötande och individanpassning guidar personalen hur de ska agera gentemot omsorgstagaren. Omsorgstagarens rätt till självständighet och integritet finns också framskriven, tillsammans med rätten att kunna göra sig förstådd på sitt språk (Socialstyrelsens föreskrifter om värdegrunden i socialtjänstens omsorg om äldre, 2012). Värdegrunden finns emellertid inte med som ett utbildningsmål i VO-paketen, utan enbart som ett centralt innehåll i en av kurserna, vilket ger den en undanskymd plats i utbildningen (Kindevåg & Andersson, 2024). En turkisk studie visar hur sjuksköterskestudenter som inte har tillräckligt med kunskap om äldres hälsa och livssituation har svårt att interagera med omsorgstagarna. Studenterna kunde beskriva omsorgstagarna som barn (Bahadır-Yilmaz, 2024). Detta indikerar vikten av att eleverna i VO-utbildningen är väl förberedda och har både kunskap och förståelse för äldres situation före APL.

Äldreomsorgen ska följa Socialstyrelsens föreskrifter om hur och vilka insatser som ska utföras, till exempel dokumentation och *genomförandeplaner*. En genomförandeplan beskriver vilka insatser från kommunen som omsorgstagaren är beviljad, samt hur och när dessa uppgifter ska genomföras av personalen och inom vilken tidsrymd (Socialstyrelsens föreskrifter och allmänna råd om dokumentation i verksamhet som bedrivs med stöd av SoL, LVU, LVM och LSS, 2014). Parallellt med att elever och personal utför dessa uppgifter ska de vara beredda att kunna hantera oförutsedda händelser inom den angivna tiden. En norsk studie visade att det kan vara svårt att sätta tydliga gränser för vilka uppgifter som faktiskt ska genomföras när omsorgstagarens behov är stora, vilket påverkar både personalens samvete och tidsplanering (Martinsen Watz & Ingstad, 2023).

När omsorgstagarnas perspektiv på äldreomsorg undersökts har fokus varit på deras sjukdomar och livserfarenheter och inte på själva upplevelsen av äldreomsorgen, framkom i en brittisk litteraturöversikt (Abdi m.fl., 2019). Socialstyrelsens årliga rapport med öppna jämförelser visar dock att omsorgs-

tagare uttrycker sorg över kommunikationssvårigheter när personalen har otillräckliga kunskaper i svenska. Dessa kommunikationsproblem leder också till att den beviljade insatsen inte alltid fungerar, eftersom en viktig del för att minska omsorgstagarnas ensamhet och öka trygghetskänslan är att personalen ska kunna småprata med omsorgstagarna. Detta småprat riskerar emellertid att utebli när personalens språkkunskaper i svenska är otillräckliga (Socialstyrelsen, 2024), vilket också påverkar omsorgstagarnas känsla av trygghet. Dock framkommer det också att omsorgstagare som beskriver sina erfarenheter av den svenska äldreomsorgen ofta säger "men vi hade tur" och berättar om positiva möten med personalen (Brytting, 2021).

En erfaren kollega, i detta fall undersköterska, utses på arbetsplatsen till handledare med ansvar för att introducera och stödja eleven under APL-perioden, samt visa på yrkets praktiska moment (Mårtensson, 2014). Genom att följa handledaren observerar eleverna hur arbetsuppgifter genomförs (Breen & Rekdahl, 2019) och hur omsorgstagare bemöts (Thunborg, 2016). Observation räcker dock inte för att befästa yrkeskunnandet, utan eleverna behöver också utföra uppgifterna med sina kroppar för att ett lärande ska ske (Mikkonen m.fl., 2017). Hela personalgruppen spelar en central roll i elevernas lärande eftersom de genom att lyssna på gruppens samtal och diskussioner får tillgång till nya kunskaper (Wegener, 2014). Därför är hela kollegiet viktigt för att stödja elevernas lärande genom att både verbalisera och synliggöra praktikgemenskapens arbetsuppgifter (Billett, 2006). Det krävs också att handledare och personal har förståelse för att utrikesfödda vuxna elevers bakgrund skiljer sig från majoritetsbefolkningens, och att eleverna aktivt behöver inkluderas i praktikgemenskapen (Lasonen m.fl., 2020). Emellertid riskerar både utrikesfödda elever och personal att utsättas för rasistiska kommentarer från omsorgstagare och deras anhöriga. Dessa uttryck förklaras ofta bort som relaterade till ålder, demens eller okunskap och bemöts av personalen med professionellt förhållningssätt (Storm, 2018). Diskriminering av utrikesfödd personal kan även förekomma inom en personalgrupp (Khor m.fl., 2024).

Teoretiska utgångspunkter

Som teoretiskt ramverk används *teorin om situerat lärande*, som ser på normer och värderingar som en naturlig del av människans sociala sammanhang. I detta avsnitt presenteras teorins bärande och för denna artikel relevanta begrepp.

Situerat lärande

Inom teorin om situerat lärande definieras lärande som något som sker genom anpassning och samspel mellan människa och omvärld (Wenger, 1998). Lärandet ses således som situationsbundet, och för att *deltagarna* ska utveckla kunskap och

förmåga behöver de kunna kommunicera, samspela med och förstå varandra (Lave & Wenger, 1991). Allt detta sker i *praktikgemenskapens* sociala sammanhang, där det uttalade konkreta som språk, begrepp, lagar, regler och artefakter existerar parallellt med utsagda och förgivettagna normer, det som aldrig riktigt uttrycks men ändå definierar den enskilda praktikgemenskapen (Wenger, 1998). Varje praktikgemenskap kännetecknas av ett *ömsesidigt engagemang* (mutual engagement) och en *delad begreppsapparat* (shared repertoire). Det förstnämnda beskriver deltagarnas inbördes relationer som kan präglas både av sammanhållning och konflikter. Deltagarnas ifrågasättande kan visserligen leda till meningsskiljaktigheter, med det vittnar ändå om ett större engagemang än om de enbart hade varit följsamma gentemot exempelvis nya rutiner. En delad begreppsapparat skapas genom att deltagarna tillsammans förhandlar fram artefaktens och aktivitetens olika betydelse, användningsområde och innehåll, en så kallad *meningsförhandling*. Även rutiner, berättelser och deltagarnas agerande ses som en meningsförhandling (Wenger, 1998). Flera närliggande praktikgemenskaper bildar ett *praktiklandskap* med flexibla gränser. Lärande sker bland annat när dessa gränser korsas och då deltagarna utbyter erfarenheter med varandra samt möter olika artefakter, rutiner och agerande (Wenger, 2010). En praktikgemenskap är aldrig statisk, den är i ständig förändring eftersom deltagare både tillkommer och försvinner. För att förhindra att praktikgemenskapen upphör behöver således nya deltagare välkomnas och ges tillträde (Wenger, 1998).

Äldreomsorgen som helhet kan alltså förstås som ett praktiklandskap, eftersom den rymmer flera praktikgemenskaper – exempelvis olika hemtjänstgrupper, särskilda boenden, chefer och sjuksköterskor. Samtliga praktikgemenskaper består alltså av olika deltagare med olika uppgifter och ansvar som tillsammans bildar praktiklandskapet äldreomsorg. Likaså kan utbildningen också förstås som flera praktikgemenskaper: klasser, lärarlag, administrationen med flera, som tillsammans interagerar och bildar ett praktiklandskap. En elev rör sig från utbildningen till en del av äldreomsorgen, och ett lärande kan ske när gränserna korsas mellan olika praktikgemenskaper och -landskap. Även inom äldreomsorgen kan gränser korsas, exempelvis när en undersköterska byter arbetsplats från ett särskilt boende till en hemtjänstgrupp, och ett lärande sker eftersom rutiner och arbetsuppgifter skiljer sig mellan de olika praktikgemenskaperna (jmf. Wenger, 1998). Således används i denna artikel begreppet praktiklandskap om äldreomsorg och utbildning i stort, och praktikgemenskap när det syftar på en specifik arbetsplats.

Legitimt perifert deltagande beskriver elevernas rätt att vara deltagare i en praktikgemenskap, dock är deltagarnas inbördes relationer inte alltid jämbördiga som till exempel den mellan handledare och elev (Wenger, 1998). Genom legitimt perifert deltagande får eleverna del av praktikgemenskapens kunskaper

både via observation och aktivt deltagande, och en rörelse kan påbörjas från periferin in mot praktikgemenskapens centrum. Ett lärande sker således främst genom ett aktivt deltagande i olika situationer, och teoretiska kunskaper omsätts till praktiska när deltagarna använder både kropp och intellekt för att utföra uppgifterna (Lave & Wenger, 1991). För att bli en fullvärdig deltagare i praktikgemenskapen krävs också kännedom om den senaste informationen och skvallret (Wenger, 1998).

Genom att tillsammans med andra delta i olika praktikgemenskaper formas hos deltagaren en *identitet*, vilket är en ständigt pågående och komplicerad process. Den kan beskrivas som en *vandring* genom praktiklandskapet där deltagarens identitet formas genom deltagande, både perifert eller mer centralt, eller ett helt uteblivet deltagande, i olika praktikgemenskaper samt i samband med korsandet av olika gränser (Wenger, 1998).

Att se VO-utbildningen och äldreomsorgen som praktiklandskap och lärandet som situerat bidrar konstruktivt till analysen eftersom det lyfter fram hur lärandet sker genom ett aktivt deltagande, vilket i sin tur genererar både teoretiska och praktiska kunskaper. Teorin om situerat lärande bygger på en integrering av teori och praktik, vilket gör den särskilt relevant för att förstå elevers lärande i ett sammanhang, där de kontinuerligt rör sig mellan olika praktikgemenskaper och -landskap och korsar olika gränser. I denna process formas elevernas identitet genom delaktighet – både perifert och centralt eller i frånvaro av delaktighet – i olika praktikgemenskaper.

Metod

För att få svar på forskningsfrågorna har studien en kvalitativ ansats med fokusgruppsintervjuer som metodval, eftersom det anses vara ett vänligt och respektfullt sätt att samla in data om känsliga ämnen (Wibeck, 2010), vilket elevernas upplevelser kan tolkas som. För att eleverna skulle våga berätta om sina upplevelser var det en fördel att de kände varandra sedan tidigare (Wibeck, 2010), och därför utformades fokusgrupperna utifrån elevernas terminstilhörighet. De kunde då känna trygghet och stöd i varandra eftersom alla hade liknande erfarenheter (Morgan, 1998). Fokusgruppsintervjuer möjliggör också att en större variation av erfarenheter kommer till uttryck jämfört med enskilda intervjuer (Patton, 2002) och det krävs inte heller någon tidigare relation mellan elever och intervjuare (Wibeck, 2010), vilket var fallet i denna studie.

Urval

De som kunde ge underlag för att forskningsfrågorna skulle kunna besvaras var utrikesfödda vuxna elever på någon form av VO-utbildning, alltså ett så kallat strategiskt urval (Bryman, 2020). Därför skickades en förfrågan om elevers

deltagande till rektorer inom komvux, och slutligen samtyckte fem vuxenutbildningsanordnare utspridda i tre län till medverkan. Rektorerna godkände att fokusgruppsintervjuerna genomfördes på respektive skola under skoltid för att eleverna skulle känna sig trygga (Krueger, 1993). Därefter kontaktades yrkeslärarna i vård och omsorg på dessa skolor och de fick information om studien, antingen i ett digitalt eller fysiskt möte med möjlighet att ställa frågor. Samtliga lärare valde att själva fråga och informera eleverna om studien, och de fick ett informationsbrev som delades ut till eleverna. Fokusgrupperna utformades utifrån den studietermen eleverna tillhörde, både de som var i början av respektive utbildning och i slutet av undersköterskeutbildningen ingick i studien för att få med en bredd av erfarenheter (Wibeck, 2010). Totalt deltog sju elevgrupper varav fyra grupper var i början av sin utbildning till undersköterska eller vårdbiträde och tre i slutskedet av sin undersköterskeutbildning. Till varje fokusgruppsintervju hade fyra till sex elever bjudits in, baserat på vad Wibeck (2010) beskriver vara en lämplig gruppstorlek. Dock var det på grund av sjukdom endast två elever i en grupp, vilket ändå kan ses som en fungerande fokusgrupp (Toner, 2009), och övriga grupper hade tre till sex deltagare. Fyra av fokusgruppsintervjuerna genomfördes på respektive skola och övriga via det digitala mötesverktyget Teams, eftersom jag var sjuk när två av intervjuerna var inplanerade. Tillsammans med lärarna på berörd skola togs beslutet att intervjuerna skulle genomföras digitalt på grund av svårigheter att boka ny tid med hänsyn till elevernas APL och att en grupp avslutade utbildningen kort därpå. Lärarna var behjälpliga med att ordna det digitala mötet så att eleverna träffades i sitt klassrum och mötte mig digitalt. Den tredje digitala fokusgruppsintervjun planerades så redan från början eftersom eleverna hade APL och inte kunde komma till sin skola. Totalt deltog 29 elever, 21 kvinnor och åtta män, samtliga födda utanför Europa med vistelsetid i Sverige mellan tre och 16 år. Flertalet av dem kombinerade studierna med arbete eller praktik inom äldreomsorgen, vilket innebär att APL, språkpraktik och yrkeserfarenhet inte skiljs åt i berättelserna.

Genomförande

Att använda fokusgruppsintervjuer som metod innebär att ett samtal fördes på gruppnivå runt ett förberett ämne – normer och värderingar inom äldreomsorgen. Eleverna kunde i denna situation välja att dela med sig av sina upplevelser och insikter på antingen ett personligt eller ett generellt plan (Wibeck, 2010), eller inte alls (Överlien m.fl., 2005).

Varje fokusgruppsintervju inleddes med att jag berättade lite om min bakgrund både från äldreomsorgen där jag har arbetat som specialist-sjuksköterska, och komvux där jag varit verksam som legitimerad yrkeslärare. Därefter spelades ett så kallat stimulusmaterial upp för eleverna (Wibeck, 2010)

- en kort filmsekvens som visade hur två undersköterskor agerade på ett överdrivet olämpligt sätt i sitt bemötande av en omsorgstagare. Syftet var att rikta elevernas uppmärksamhet mot äldreomsorgens praktiklandskap och den efterföljande intervjun, samt att ge dem möjlighet att referera till filmen i stället för att utgå från egna erfarenheter (Överlien m.fl., 2005). Eleverna reagerade med upprördhet på filmsekvensen, men innan de fick börja berätta om sina erfarenheter ombads de att skriva ned sina tankar om det de sett. Därefter läste samtliga elever upp detta för gruppen för att säkerställa att samtliga elever gavs talutrymme redan från början (jmf. Zeller, 1993). Samtalet utgick sedan från en semistrukturerad intervjuguide med teman från äldreomsorgens värdegrundsbegrepp samt normer och värderingar. Frågorna anpassades efter samtalets gång och min roll var att ställa följdfrågor, återföra samtalet till ämnet vid behov och uppmuntra tystare deltagare att berätta eftersom allas åsikter värderades lika (Zeller, 1993). Samtalen präglades av växlande känslor, allt ifrån frustration till skratt av igenkänning.

Fokusgruppsintervjuerna spelades in med hjälp av en diktafon och varade mellan 55 och 80 minuter, vilket sedan transkriberades till 127 sidor text. Elever, skolor och orter avidentifierades och försågs med olika nummer. Transkriberingen gjordes så nära talspråket som möjligt, med vissa ändringar, till exempel dej/mej som dig/mig. Halva ord och upprepningar har försiktigt redigerats, men grammatiska fel har skrivits ut för att låta elevernas röster tydliggöras. Ibland har det varit svårt att höra och förstå vad som sades, och efter fem genomlysningar har detta antecknats som "ohörbart". Tydliga känslouttryck noterades och all transkribering skedde löpande under datainsamlingen (Bryman, 2020).

Analys

De transkriberade intervjuerna analyserades med hjälp av kvalitativ innehållsanalys, med Graneheim och Lundmans (2004) instruktioner som utgångspunkt. Studien har en abduktiv ansats, vilket innebär att analysen gjordes genom att pendla mellan de transkriberade fokusgruppsintervjuerna och studiens teoretiska ramverk samt de bärande begreppen normer och värderingar. Flera genomläsningar av materialet genomfördes för att förstå elevernas samtal på djupet och undvika missförstånd (Krueger, 1993). I takt med den fördjupade förståelsen kunde också analysen vidgas och tolkningarna utvecklas (Dubois & Gadde, 2002, 2014), vilket illustreras i Tabell 1.

I analysprocessens första steg lästes samtliga texter igenom och de avsnitt, *meningsenheter*, som svarade mot syftet markerades och samlades i olika ämnesområden, vilka i sin tur fick en etikett, *kod* (Graneheim & Lundman, 2004). Varje fokusgruppsintervju analyserades först separat för att sedan sammanföras för en gemensam bearbetning där samtliga meningsenheter sorterades in i olika

”Man är där, men du är osynlig kan man säga”

kategorier och underkategorier (Graneheim & Lundman, 2004). Slutligen framträdde tre huvudkategorier som presenteras i avsnittet Resultat och analys, och under denna process valdes illustrerande citat ut för att ge röst åt elevernas perspektiv.

Tabell 1. Exempel på meningsenheter som kodats, tolkats och analyserats gentemot bärande begrepp samt teoretiskt ramverk och slutligen kategoriserats.

Meningsenhet	Kod	Tolkning	Normer, värdering och situerat lärande	Kategori
Våra föräldrar är jätteduktiga, man lär sig allting de gör ... Här elever går i skola men de använder inte dem som antecknar, de använder inte fortfarande allting skolan. Våra föräldrar är, de kan inte läsa, de kan inte skriva men de kan det praktiska. Vi är teoretiska, våra föräldrar är inte teoretiska.	Kultur-skillnader	Utbildning (teori) viktigt i Sverige	Eleverna har fått syn på normen att utbildning är viktigt. Legitimt perifert deltagande	Vikten av utbildning
Brukarna är olika när jag har gjort praktik jag har träffat många brukare. Jag träffar en brukare hon pratar hon är hon skratta hon. Men en brukare hon pratade inte. Ja, men för hjälpen till henne är vi gå ut, hon behöver ingen människa.	Bemötande	Personalen behöver bemöta omsorgstagarna individuellt efter deras behov.	Värdering att äldre ska respekteras, vilket också är äldreomsorgens norm genom värdegrunden. Legitimt perifert deltagande	Abstrakta begrepp får liv
De försöker slänga allt på oss som vi jobbar som timvikarie. Att ni jobbar som timvikarie, ni har ingen delegering, ni ska ta och duscha och duscha och duscha och då ni ska göra så och så...	Diskriminering	Utrikesfödda får högre arbetsbelastning än svenskfödda vikarier.	Personalens värderingar inte i linje med samhällets normer. Ej jämbördiga relationer	Möte med diskriminering

Metodreflektioner

Fokusgruppsintervjuer som metod innebar bland annat att min roll som intervjuare inte var lika framträdande som vid enskilda intervjuer (Jowett & O'Toole, 2006). Emellertid behövde jag lyssna aktivt (Wibeck, 2010) och vara uppmärksam

på känslan i rummet, även i de digitala, för att undvika att eleverna blev stressade eller påverkade på annat sätt (Morgan, 1998). Elevernas ansiktsuttryck avslöjade om och när de inte förstod vad som sades (Danielsson, 2012) och frågan kunde då omformuleras, och ibland hjälptes eleverna åt genom att översätta till modersmålet eller förklara på svenska för varandra så att alla kunde vara delaktiga i samtalet. Metoden innebar också att elevernas upplevelser var i centrum, och det blev ett rikt material eftersom eleverna berättade om sådant som inte fanns med i intervjuguiden.

Lärarna informerade eleverna om studien och valde ut medverkande elever, vilket å ena sidan kan innebära en felkälla, men å andra sidan kan lärarens information ha påverkat eleverna positivt till deltagande jämfört med om en okänd givit samma information.

Fokusgruppsintervjuerna genomfördes av mig, vilket påverkar studiens *pålitlighet* positivt eftersom den stärks av att *en* intervjuare genomför samtliga intervjuer. Det möjliggjorde också att fokusgruppsintervjuerna kunde genomföras på liknande sätt, vilket i sin tur också underlättade jämförbarheten mellan dem. Min förståelse fördjupades även över tid, vilket påverkade följdfrågorna som ställdes eftersom jag kunde bygga vidare på insikter jag fått i tidigare intervjuer (Albrecht m.fl., 1993).

Elevernas bakgrund och kultur skilde sig åt, vilket indikerar att datainsamlingen kan ses som solid vilket stärker studiens *trovärdighet* (Lincoln & Guba, 1985), men det är dock omöjligt att veta om eleverna överdrev eller höll inne med åsikter för att passa in med gruppens åsikter. Det sänker i sin tur trovärdigheten (Krueger, 1998). Eleverna vågade emellertid berätta om svåra situationer, vilket tyder på att de kände sig trygga i sammanhanget (jmf. Wibeck, 2010), vilket stärker trovärdigheten (Albrecht m.fl., 1993).

Sju genomförda fokusgruppsintervjuer bedöms vara mer än tillräckligt för att fånga elevernas erfarenheter och upplevelser (Peek & Fothergill, 2009). En av fokusgrupperna bestod av endast två elever, vilket kan ses som för få deltagare men detta bedöms ändå inte ha försvagat studiens trovärdighet, eftersom den lilla gruppen möjliggjorde en förtrolig atmosfär i samtalet. Det kan i sin tur ha bidragit till ett ännu större erfarenhetsutbyte mellan eleverna (Toner, 2009). Det finns också en risk att studiens trovärdighet försvagades av att tre av intervjuerna genomfördes via Teams (jmf. Wibeck, 2010). Dock var det inte några problem med att uppfatta känslan i rummet eftersom eleverna delgav varandra sina åsikter och visade olika känslouttryck, som upprördhet och igenkännande skritt. Det extra avstånd som uppstod av det digitala mötet kan till och med ha underlättat för eleverna att delge känslig information (Wibeck, 2010).

Kodningen av empirin skedde i programmet NVivo, och det påverkar studiens transparens positivt (Bryman, 2020). Praktiklandskapets olika kontexter, datainsamlingen och analysprocessen finns beskrivna vilket stärker

studiens *överförbarhet* (Lincoln & Guba, 1985). Överförbarheten försvagas dock av att det inte finns någon utförlig beskrivning om elevernas bakgrund, men den stärks genom illustrerande citat i resultatdelen (Graneheim & Lundman 2004). Områden som studiens resultat borde kunna överföras till är gymnasieskolans VO-utbildning samt andra yrkesutbildningar på gymnasiet och komvux, och olika vårdutbildningar på högskolenivå i en nordisk kontext.

Etiska överväganden

I enlighet med Vetenskapsrådets (2017) riktlinjer gjordes en etikprövning som sedan godkändes av Etikprövningsmyndigheten, eftersom känsliga personuppgifter såsom etnicitet och religion kunde framkomma i samtalen. En så kallad etisk riskanalys genomfördes också före datainsamlingen hösten 2023 i syfte att säkerställa att eleverna inte skulle lida någon skada. Ett problem som identifierades var att eleverna kunde avstå från att berätta om vissa erfarenheter (Överlien m.fl., 2005), och för att i möjligaste mån förebygga det gavs information om vad fokusgruppsintervjuerna skulle handla om så att eleverna var beredda på att dela sina erfarenheter (Zeller, 1993). Andra faktorer som det togs hänsyn till var tidsaspekten och elevernas känsla av trygghet (Kjellström, 2012), och eftersom fokusgruppsintervjuerna genomfördes under ordinarie skoltid på respektive skola bedömdes riskerna för negativ påverkan minimal och att känslan av trygghet ökade. Eleverna fick muntlig och skriftlig information (via lärarna) så de visste vad fokusgruppsintervjun skulle handla om innan de tackade ja till medverkan (Zeller, 1993). Informationsbrev var skrivna på lättare svenska för att undvika missförstånd, och det poängterades att deltagandet var frivilligt (Vetenskapsrådet, 2017). Dessutom underströk jag att detta inte var ett test och att det inte fanns några fel svar på frågorna, samt att deras erfarenheter var viktiga. För att undvika missförstånd berättade jag att min roll var att lyssna och ibland ställa frågor. Eleverna uppmanades att inte säga något som de sedan kunde ångra (Överlien m.fl., 2005), samtidigt som de informerades om att de kunde avbryta sitt deltagande när som helst (Vetenskapsrådet, 2017). Jag berättade också att anteckningar som gjordes var mina och inget av det som sades skulle föras tillbaka till lärarna, och att skola, ort och namn skulle fingeras i texten. Det som kan påverka konfidentialitetskravet (Vetenskapsrådet, 2017) är om eleverna berättade för andra om vad som sagts (Morgan, 1998), vilket de ombads att inte göra. Dock kan detta inte kontrolleras. Innan själva fokusgruppsintervjuerna startade gavs det tid för eleverna att ställa ytterligare frågor varefter de fyllde i samtyckesblanketterna (Vetenskapsrådet, 2017). Lärarna var behjälpliga med att samla in dessa och skicka dem till mig per post när fokusgruppsintervjuerna skedde digitalt. I den från början planerade Teams-intervjun distribuerade lärarna informationsbrev och samtyckesblankett till eleverna, som sedan skickade samtyckesblanketterna till mig digitalt.

Under bearbetningen av fokusgruppsintervjuerna har citerade elever givits fingerade namn som ändå speglar vilket land de kommer från. Citaten är sparsamt redigerade för att underlätta för läsarna, men visar ändå elevernas talspråk (Vetenskapsrådet, 2024).

Resultat och analys

Nedan presenteras resultat och analys av elevernas berättelser om vilka normer och värderingar som framträdde för dem under deras deltagande i praktiklandskapet äldreomsorg. Begreppet praktikgemenskap avser här den lokala personalgruppen och begreppet praktiklandskap används som redan nämnts för äldreomsorgen som helhet. Analysen har genomförts utifrån teorin om situerat lärande samt begreppen normer och värderingar, där tre kategorier slutligen utkristalliserades: *Vikten av utbildning*, *Abstrakta begrepp får liv* och *Möte med diskriminering*.

Vikten av utbildning

I fokusgruppsintervjuerna uttryckte eleverna att de fått syn på den uttalade svenska normen om att utbildning är viktigt, och de jämförde med sina hemländer där föräldrarna lärt sig yrken utan en längre skolgång. Eleverna har således fått syn på både uppväxtlandets och det nya samhällets normer (Zielinska, 2019) och tycks ha anammat och anpassat sig efter den nya normen (Cialdini, 2007). Eleverna påpekade att utbildning är viktigt, både för att komma in i det svenska samhället och för att få ett arbete inom äldreomsorgen. Genom legitimt perifert deltagande har eleverna en naturlig plats i praktiklandskapet äldreomsorg, vilket också ger dem en möjlighet att utveckla sin yrkesidentitet. Eleverna upplevde att utbildningen gav dem en ökad förståelse för omsorgstagarnas situation, framför allt hur olika sjukdomar kan påverka omsorgstagarna. Ökad kunskap beskrevs också som en faktor som minskar risken för misstag i det praktiska arbetet. Genom att korsa gränserna mellan utbildning och äldreomsorg får eleverna del av nya erfarenheter, vilket i sin tur genererar ett lärande (Wenger, 1998).

Innan jag började utbildningen, jag förra året gjorde praktik på äldreboende. Jag gjorde många fel för att jag förstår inte vilken informationen och de förklarade inte bra hur man hjälper [...] Jag har tagit mycket information. Ja, så det blir lättare. (Hani, termin 1)

Eleverna framhöll att de ser skillnader i personalens förhållningssätt gentemot omsorgstagarna. De uttrycker det som att utbildad personal har ett "bättre" förhållningssätt jämfört med outbildad äldreomsorgspersonal. Elevernas observationer indikerar att utbildning underlättar för personalen att ta till sig praktik-

landskapet äldreomsorgs värdegrund, inklusive anpassning och att samspela med andra. Eleverna noterade personalens olika förhållningssätt gentemot omsorgstagarna och kan i formandet av sin yrkesidentitet välja att anamma detta förhållningssätt eller inte (Wenger, 2010).

Enligt eleverna är handledarna viktiga källor till kunskap, och genom att både observera och vara delaktiga lär de sig arbetet. Eleverna använder den kunskap de får med sig från äldreomsorgen när de kommer tillbaka till skolan, och vice versa, till exempel olika artefakters användningsområden. Genom deltagande i en meningsförhandling kring artefakternas funktion och användning kan eleverna använda denna kunskap i nya situationer, således sker ett lärande när gränser korsas mellan olika praktikgemenskaper (Wenger, 1998).

Eleverna skildrade hur de kämpar med yrkesspråket som de tycker är svårt eftersom det innehåller många nya begrepp. Genom ett aktivt deltagande i praktikgemenskapen får de tillgång till praktikgemenskapens språk och begrepp, vilket i sin tur skapar förutsättningar för lärande (Wenger, 1998). Eleverna gav exempel på när även vardagsspråket kan orsaka missförstånd:

Till exempel när jag började på äldreboende det var ja andra dagen, den tredje dagen min kollega sa till mig: ”Han brukar ta kaffe med dammsugare”, alltså kaffe med dammsugare! [Andra informanter ser frågande ut. Navid termin 2 förklarar att det är en speciell sorts kaka, alla skrattar.]

Eleverna uttryckte att det som vuxen krävs en stor ansträngning för att lära sig ett nytt språk, och de lägger stort ansvar på sig själva att våga fråga när de inte förstår – trots en oro för att språksvårigheterna kan äventyra deras möjlighet till arbete. Brister i förståelse och kommunikation mellan elever och personal upplevdes som allvarligt av eleverna, särskilt med tanke på risken för att omsorgstagare kan fara illa. I situationer där valet står mellan att ställa frågor eller att riskera missförstånd kan de vägledas av sina värderingar – där omsorgstagarens säkerhet ses som det viktigaste. Eleverna bar också på en frustration över att inte kunna småprata med omsorgstagarna, inte bara på grund av språkbristen utan också på grund av saknaden av kunskap om samhällets (lokal)historia.

I fokusgruppsintervjuerna framkom också elevernas längtan efter att tillägna sig ytterligare kunskap och kunna avsluta utbildningen för att ”komma upp ett litet streck” (Simin, termin 4), vilket kan leda till både tillsvidareanställning och högre lön. Eleverna är då inte längre nykomlingar i praktiklandskapet äldreomsorg och har därtill följt samhällets utbildningsnorm.

Abstrakta begrepp får liv

I fokusgruppsintervjuerna beskrev eleverna hur de genom att observera handledarna fått syn på olika abstrakta begrepp, som genom handledarnas agerande fått en konkret innebörd. Abstrakta begrepp synliggörs således för eleverna via praktikgemenskapens meningsförhandling om hur olika värdegrundsbegrepp

ska omsättas till praktiska handlingar (Wenger, 1998). Normen *självbestämmande* beskrev eleverna som att varje omsorgstagare ska behandlas utifrån sin unika situation. Ett exempel som gavs är att omsorgstagaren ska tillfrågas vad denne önskar till frukost, även när det finns antecknat i genomförandeplanen, som inte bör följas slaviskt enligt eleverna. Ett annat exempel som gavs var när handledarna tillfrågade omsorgstagarna om eleverna får följa med in och hjälpa till. Genom aktivt deltagande i praktikgemenskapen får eleverna således syn på både gällande normer och värdegrund, som de sedan också förväntas följa. Dock framkom också elevernas värdering att den uttalade normen om självbestämmande kan vara negativ. De berättade om situationer när omsorgstagare hade nekat psykiatrisk hjälp trots suicidrisk, och där närstående hade tillkallats för att lösa situationen eftersom personalen inte får motsätta sig självbestämmanderätten. De berättade även om omsorgstagare som lever i misär på grund av att de tackar nej till hjälp med städning och hygien. I dessa beskrivningar framträdde elevernas egna värderingar tydligt, vilka emellertid är i strid mot rådande norm.

Eleverna berättade om den uttalade normen att omsorgstagaren ska få vara så självständig som möjligt, vilket de inte kände igen från sina hemländer där den äldre släktingen ses mer som en passiv mottagare av hjälp. Normerna eleverna har vuxit upp med överensstämmer alltså inte med det svenska samhällets, vilket kan tolkas som att eleverna styrs av samhällets yttre påtryckningar snarare än inre motivation när de följer rådande norm (jmf. Cialdini, 2007). Eleverna deltar således genom både ord och handling i praktikgemenskapens meningsförhandling om hur värdegrundsbegreppet självbestämmande ska tolkas och förstås.

Och någonting jag tycker om i Sverige är att han är självständig, liksom den här personen han har boende men ingen vård, eh, han har integritet att fortsätta hans liv på något sätt. Hemtjänst kommer och hjälper han, det finns god man som hjälper med ekonomin. Alltså det spelar ingen roll om han har barn eller inte. (Ayob, termin 3)

Eleverna beskrev situationer där de gör mer än den beviljade insatsen anger eftersom de upplever att omsorgstagaren är i behov av det, vilket också kan leda till konflikt med övrig personal eftersom detta går utanför genomförandeplanens riktlinjer. För att undvika dessa konflikter väljer eleverna ibland att inte informera handledare och övrig personal om allt de gör. Det kan tolkas som att eleverna visar ömsesidigt engagemang eftersom de ifrågasätter rådande norm, och deras värderingar kan här ses som i konflikt med gruppens uttalade normer (jmf. Hjerm m.fl., 2020). Trots det väljer eleverna att följa sina värderingar, även om det innebär en risk för friktion när normer bryts (Martinsson & Reimers, 2008).

Att vara professionell är, enligt eleverna, en norm som innebär att yrkespersonen lämnar det privata hemma.

”Man är där, men du är osynlig kan man säga”

Man ska inte tänka något annat när man är på jobbet. Man ska inte tänka om annan saker som du har hemma eller som du har något annat som så då måste fokusera på, på sitt jobb, och man är där. (Hellen, termin 1)

I denna norm inkluderade eleverna också ett professionellt arbetssätt. Det beskrevs som att vara positiv, ha empati och respekt för omsorgstagarna, samt att ha förståelse för hur olika slags sjukdomar kan påverka omsorgstagarnas beteenden och vikten av att kunna anpassa sitt agerande därefter. Omsorgstagarna ska inte behandlas som barn, utan med respekt. Eleverna berättar att de sedan barndomen lärt sig att respektera äldre, och deras värderingar att agera respektfullt framträder tydligt i berättelserna. Genom legitimt perifert deltagande i en praktikgemenskap omsätts elevernas teoretiska kunskaper till praktiska genom att de själva utför yrkets olika handlingar med sina kroppar.

Under fokusgruppsintervjuerna framkom det också att personalen inte alltid agerar professionellt, enligt eleverna, utan blir otåliga och irriterade på omsorgstagarna. Detta bortförklarar eleverna emellertid med stress eller arbetsplatsens sociala klimat. Eleverna var tydliga med att de själva vill respektera och bemöta omsorgstagarna på ett korrekt sätt. Praktikgemenskapens oskrivna normer tycks här inte alltid stämma överens med äldreomsorgens värdegrund om ett professionellt förhållningssätt, vilket också krockar med elevernas värderingar. Eleverna kan i dessa situationer välja bort olika handlingssätt som de observerat, och i stället hålla kvar vid sina tidigare värderingar (Lönnqvist m.fl., 2013).

Normen och begreppet *ett gott bemötande* beskrevs under fokusgruppsintervjuerna som att knacka på dörren, hälsa på omsorgstagaren och säga sitt namn och ärende, vilket förebygger förvirring och konflikter hos omsorgstagaren enligt eleverna. Arbetssättet är i linje med elevernas personliga värderingar: att äldre ska respekteras, vilket också överensstämmer med praktiklandskapets uttalade normer och värdegrund. Ett lärande har skett hos eleverna genom ett legitimt perifert deltagande, vilket illustreras av att de kan beskriva varför de ska agera på ett visst sätt.

Bara ja, jag kollar på andra vad de säger liksom vad de gör. Man lär sig så mycket av andra tycker jag med för att man ser liksom vad de gör och säger, man lär sig efter fel och bra saker också. (Rahwa, termin 2)

Eleverna definierar också ett gott bemötande som att ha en positiv och glad attityd gentemot omsorgstagarna samt att ha bra kommunikation med kollegor och omsorgstagare. Det inkluderar också att kunna prata bra svenska och att ha kunskap om och erfarenhet av att arbeta i äldreomsorgen. Genom deltagande i praktikgemenskapen får eleverna tillgång till språk och den delade begreppsapparat som förekommer där, samt möjlighet till ytterligare lärande som i sin tur leder till mer kunskap och förmåga.

I fokusgruppsintervjuerna framkom berättelser om personal som säger till eleverna att de inte ska engagera sig för mycket "eftersom det bara är ett jobb", vilket gör att eleverna tappat respekt för dessa medarbetare. Elevernas värderingar att äldre ska behandlas som släktingar med stor respekt krockar med detta synsätt och outtalade normer. Eleverna har möjlighet att här själva välja om de vill anamma praktikgemenskapens synsätt eller inte (jmf. Cialdini, 2007).

Värdegrundsbegreppet *trygghet* är ytterligare en norm som av eleverna definierades som att omsorgstagaren ska ha närhet till och känna personalen.

Väldigt viktig och man måste vara trevlig också mot brukare, att man pratar och försöker vara snäll och på ett sätt som brukaren känner sig trygg och så med oss. Det är viktigt att man göra såna saker tror jag. (Zemar, termin 3)

Samtal, lugn och ro samt att ge omsorgstagarna tid är viktiga delar för att skapa trygghet enligt eleverna. För att kunna inge trygghet har de observerat handledarnas agerande och därefter delvis korrigerat sitt eget beteende. Ett exempel på beteendeförändring som eleverna beskriver är den outtalade svenska normen att ha ögonkontakt för att visa respekt och lyssnande, något som i vissa länder i stället innebär en sexuell invit. Genom sitt deltagande i praktiklandskapet har eleverna fått syn på en ny norm och fått hjälp att tolka den (Zielinska, 2019) och har således kunnat ändra sitt beteende. Ett lärande har skett i denna anpassning och eleverna minskar risken att agera normbrytande, vilket annars kan leda till friktion gentemot omgivningen (Martinsson & Reimers, 2008).

Möte med diskriminering

Under fokusgruppsintervjuerna framkom det i samtliga grupper att det i praktiklandskapet äldreomsorg förekommer diskriminering av elever på grund av att de är utrikesfödda. Eleverna använder inte begreppen "rasism" eller "diskriminering" spontant, utan säger "det är för att jag inte kan språket så bra". Personalens diskriminering kan visa sig genom att de till exempel tilldelar utrikesfödda vikarier fler arbetsuppgifter än svensktalande vikarier. Värderingarna som personalen i dessa fall visar genom sitt agerande följer inte samhällets uttalade värdegrund som invånarna förväntas anamma (jmf. Bicchierri m.fl., 2023). I dessa situationer tycks de uttalade normerna ha förskjutits från att betona allas lika värde till att göra åtskillnad mellan individer, vilket också försvårar för den enskilde individen att bryta mot gruppens normer (Somerville & Abrahamsson, 2003). Praktikgemenskapens deltagare är heller inte jämbördiga, vilket illustreras med detta citat:

Jag fick jobba med en personal hon är typ, jag vet att hon gillar inte mig eftersom jag kan inte språket. När vi var inne hos äldre, så hon sa till mig att jag skulle dra upp en grind, jag förstår inte. Jag hängde inte med. Sen framför den äldre hon trycker på mitt ansikte: "Förstår du inte vad jag säger!" [...] [gråten i halsen och illustrerar med händerna vad som skedde] Jag tänkte att jag kan inte ibland, utan lite svårt också

”Man är där, men du är osynlig kan man säga”

om man pratar inte så tydligt att man hör det inte heller. Hon behöver inte göra så här utan att hon kan ta ut mig. Hon behöver inte visa att hon är irriterad inne i rummet, men det har jag sagt till chefen också. (Lan, termin 4)

Andra exempel på diskriminering som förmedlades var antagandet att eleverna per automatik har mindre erfarenhet och kunskap än svenskfödda vikarier. I dessa situationer framträder personalens personliga värderingar, vilket kan indikera att de inte fullt ut har anammat samhällets värdegrund om alla människors lika värde. Elevernas position som legitima perifera deltagare försvagas också när de exkluderas från den lokala praktikgemenskapen, vilket i sin tur leder till att lärandet också försvåras. Dock uppger eleverna att en attitydförändring kan ske hos personalen när de går en utbildning eftersom personalen då tenderar att bli mer behjälplig och förklara för dem varför ett moment görs på ett visst sätt. Praktikgemenskapens deltagare öppnar då upp för eleverna att bli fullvärdiga legitima perifera deltagare, vilket underlättar lärandet.

Eleverna berättade om praktikgemenskaper som präglades av personalkonflikter, som delvis handlar om anställningsform – tillsvidareanställd eller vikarie – men där grundproblemet snarare tycktes handla om huruvida personalen är svensk- eller utrikesfödd. Praktikgemenskapen verkar här ha normen att det svenska är det enda rätta, och ”allt annat” är fel. Eleverna angav att de under sin uppväxt har fått lära sig att se upp till européer som välutbildade och dugliga, men att de under tiden i Sverige har mött värdegrunden om alla människors lika värde. Normen från deras barndom riskerar dock att permanentas som en värdering hos dem: att det är skillnad beroende på var man är född, vilket emellertid är tvärs emot den svenska normen om allas lika värde.

Det som jag ju ska säga i vårt hemland där så vi respekterar mycket till utländska som kommer från till exempel Europa. Vi känner så också kanske de har lite högre status, kanske därför vi respektera. (Simin, termin 4)

Eleverna blir inte inbjudna i samtal eller informationsutbyte, vilket exkluderar dem från att bli fullvärdiga medlemmar i praktikgemenskapen, och deras möjlighet till lärande begränsas också eftersom rörelsen in mot praktikgemenskapens centrum inte kan ske (Wenger, 1998). När eleverna exkluderas framträder också obalansen mellan deltagarna extra tydligt, och när värderingen att utrikesfödda inte är välkomna synliggörs riskerar den att uppfattas som arbetsplatsens norm.

Det kan jag säga att jag har märkt också inte direkt men det känns så här att när du sitter i en samling kan man säga, några kamrater sitter under lunchtiden eller rasttiden och man säger att om du är invandrare du är inte riktigt välkommen in i diskussionen. Du är inte riktigt välkommen i nån pratsam situation, att man är där men du är osynlig kan man säga. (Zemar, termin 3)

I fokusgruppsintervjuerna framkom också att omsorgstagarnas värderingar synliggörs genom deras ibland avoga inställningar gentemot eleverna på grund

av hudfärg eller att de bär hijab. Det visade sig bland annat genom att elevernas hjälp avvisades, men när omsorgstagarna har fått möjligheten att lära känna dem ökade emellertid acceptansen, och eleverna välkomnades av omsorgstagarna. Omsorgstagarnas värderingar kan här ha förändrats, eller så väljer de att acceptera eleverna utåt sett för att följa samhällets uttalade norm. Eleverna bortförklarade dock omsorgstagarnas negativa inställning med att "de har en demenssjukdom", och uppgav att de lärt sig acceptera omsorgstagares och personalens kommentarer och agerande för att kunna fortsätta sitt arbete inom praktiklandskapet äldreomsorg.

Diskussion

Artikeln syftar till att belysa och problematisera vilka normer och värderingar som framträder för vuxna utrikesfödda elever på en vård- och omsorgsutbildning under praktiktiden inom praktiklandskapet äldreomsorg. I följande avsnitt besvaras studiens tre forskningsfrågor med utgångspunkt i resultat och analys, som diskuteras gentemot tidigare forskning och med reflektioner kring möjliga konsekvenser.

Normer och värderingar som eleverna har med sig

Resultatet visade att eleverna respekterar äldre men har med sig normen att äldre är hjälplösa, utan att för den skull betrakta dem som barn, vilket kan tolkas som att eleverna ändå har en förståelse för äldres livssituation (jmf. Bahadir-Yilmaz, 2024). Normen självbestämmande beskrevs av eleverna som både positiv och negativ, vilket skulle kunna indikera att de behöver mer kunskap och förståelse för hur normerna självbestämmande och självständighet beskrivs (Socialstyrelsens föreskrifter om värdegrunden i socialtjänstens omsorg om äldre, 2012). Emellertid kan frågan som eleverna indirekt ställer om självständighet alltid är av godo ställas, med tanke på omsorgstagarnas ibland stora omsorgsbehov som det inte alltid finns tid för i genomförandeplanerna (Martinsen Watz & Ingstad, 2023) och till och med risk för misär. Att sätta gränser kan vara svårt för eleverna utifrån deras omsorg och empati, samtidigt som konflikter riskerar att uppstå med övrig personal när elevernas egna värderingar att hjälpa till går före ramarna och normerna som personalen har att förhålla sig till (jmf. Bang, 1999). Å ena sidan kan frågan lyftas om elevernas hjälpsamhet alltid är till gagn för omsorgstagaren när utgångspunkten ska vara bibehållen självständighet (Socialstyrelsens föreskrifter och allmänna råd om dokumentation i verksamhet som bedrivs med stöd av SoL, LVU, LVM och LSS, 2014) och för mycket hjälp i stället riskerar att stjälpa. Å andra sidan har handledaren ett ansvar att visa (Mårtensson, 2014) och verbalisera hur och varför något ska eller inte ska göras (Billett, 2006; Breen & Rekdahl, 2019). Yrkeslärarna har också ett

ansvar att vara uppdaterade på praktiklandskapets arbetsuppgifter (Lundberg, 2019) och att förbereda eleverna inför APL. Dock har äldreomsorgens värdegrund en undanskymd plats i utbildningens styrdokument (Kindevåg & Andersson, 2024) vilket kan innebära att eleverna inte får med sig tillräckligt med kunskaper inför APL i äldreomsorgen.

Ytterligare en norm som eleverna beskriver som ny för dem är vikten av ögonkontakt. Det var dock ingen självklarhet att detta skulle uppdagas för dem under VO-utbildningen eftersom styrdokumentet inte tar hänsyn till elevers olika kulturella bakgrunder (Kindevåg & Andersson, 2024). Det innebär således att det är upp till de enskilda lärarna och handledarna att hjälpa eleverna att få syn på och förstå nya normer, så att eleverna i förlängningen också ska kunna anpassa sitt agerande och bli en del av både praktiklandskapet äldreomsorg och samhället i stort.

Normer och värderingar som synliggörs för eleverna

Den svenska normen om vikten av utbildning synliggjordes för eleverna, även genom personalens agerande när de påbörjade en utbildning, vilket också Khor m.fl. (2024) har beskrivit. Denna nya hjälp- och uppmärksamheten kan möjligen förstås som ett uttryck för personalens önskan om att få fler utbildade kollegor. Detta är dock inte givet, bland annat på grund av den politiska strategin (SOU 2017:21) och synsättet att yrkesutbildningar är en genväg till arbete (Henning Loeb, 2019), när utbildningen i praktiken kan visa sig vara en senväg om elevens yrkesintresse inte sammanfaller med utbildningen (Karlsson m.fl., 2022).

Eleverna kämpar med att parallellt lära sig både vardags- och yrkesspråk (Kindenberg & Nygård Larsson, 2016) och normen att kunna kommunicera på svenska har synliggjorts för dem. Eleverna har insett att språket är deras främsta verktyg i både praktiklandskapet äldreomsorg (Khor m.fl., 2024; Lagercrantz All, 2017) och i det omgivande samhället. Samtidigt är eleverna väldigt frustrerade över språkbarriären som hindrar dem att småprata med omsorgstagarna, vilket skulle inge omsorgstagarna större trygghet (Socialstyrelsen, 2024), och där även avsaknaden av gemensam historia (Fejes, 2019) ses som ett hinder av eleverna. Samtidigt finns det beskrivet att omsorgstagarna upplever att de har bra personal (Brytting, 2021), vilket ändå indikerar att elevernas sätt att sätta omsorgstagaren först inger både stabilitet och trygghet.

Hur normer och värderingar synliggörs för eleverna

Observation av handledarnas agerande var en viktig, om inte den viktigaste källan till kunskap för eleverna (Breen & Rekdahl, 2019). Genom handledarnas agerande, både goda och mindre goda exempel, fick abstrakta begrepp en konkret innebörd där eleverna aktivt kan välja vilket agerande som de önskar anamma (Mikkonen m.fl., 2017). Detta synliggör således att handledarnas

agerande är otroligt viktigt för elevernas lärande (Billett, 2006; Mårtensson, 2014). Det indikerar också att handledarnas agerande har större inflytande än vad de kanske själva är medvetna om. Dock kan handledaransvaret ha förändrats över tid med tanke på att andelen utrikesfödda elever ökat (Skolverket, 2024e). Denna elevgrupp har andra och för handledarna kanske nya behov, samtidigt som eleverna bär med sig en annan förståelse och bakgrund jämfört med majoritetsbefolkningen. Det gör att de behöver extra hjälp för att bli en del av praktikgemenskapen (Lasonen m.fl., 2020). Här behövs ytterligare forskning, och denna artikel är en del av ett större projekt som ämnar utforska detta vidare.

Flera av äldreomsorgens värdegrundsbegrepp beskrevs av eleverna, som emellertid inte tycktes associera begreppen till en enhetlig värdegrund. Det skulle kunna indikera att värdegrunden i sin helhet inte har presenterats för eleverna under utbildningen. Dock är äldreomsorgens värdegrund något som samtlig personal i praktiklandskapet äldreomsorg förväntas arbeta efter, vilket kan bli ett dilemma om eleverna inte får med sig denna kunskap (Kindevåg & Andersson, 2024) vilket i värsta fall diskvalificerar dem för en anställning.

Somliga av praktiklandskapets deltagare visade sina värderingar genom att på olika sätt diskriminera och särbehandla eleverna, både på grund av deras ursprung (Storm, 2018) och språksvaghet (Khor m.fl., 2024). Eleverna använde inte begreppet "rasism" utan hänvisade i stället till sina brister i språket, vilket kan tolkas som att de lägger problemet utanför sig själva i något som kan påverkas, i motsats till hudfärg och ursprung. När eleverna diskrimineras kan det i förlängningen påverka deras bemötande av omsorgstagarna negativt (Cottingham m.fl., 2018), vilket inte är önskvärt. Det kan också tyckas som att alla deltagare i praktiklandskapet äldreomsorg inte har tagit till sig samhällets värdegrund om allas lika värde (HSL, 2017; Skollag, 2010; SoL, 2001) när diskriminering sker. Frågan kan också ställas om personalens värderingar och diskriminerande handlingar gentemot eleverna även påverkar personalens beteende gentemot omsorgstagarna, vilket i så fall strider mot äldreomsorgens uttalade norm om ett gott bemötande (Socialstyrelsens föreskrifter om värdegrunden i socialtjänstens omsorg om äldre, 2012).

Slutsats

En stor del av elevernas lärande, både om APL-platsens normer och värderingar samt arbetsuppgifter, sker genom observation av handledarnas och övriga deltagares agerande och handlande i praktikgemenskapen. Ett kunskapsbidrag som denna artikel bidrar med är elevernas berättelser om att abstrakta begrepp, som äldreomsorgens värdegrundsbegrepp, tydliggörs och konkretiseras för dem genom handledarnas agerande, samt genom att de själva rent praktiskt får utföra yrkets olika arbetsuppgifter för att befästa kunskapen i sina kroppar. Eleverna

möter olika normer och värderingar under sin vandring genom praktiklandskapet, och de kan välja vilka de anammar och behåller i formandet av sin yrkesidentitet. Eleverna har mött diskriminering, både verbalt och subtilt från både omsorgstagare och personal. När dessa situationer omnämns använder eleverna omskrivningen ”det är för att jag inte kan språket”. Eleverna väljer med andra ord att lägga diskrimineringen utanför sig själva i det som kan påverkas, som språkförmåga och utbildning och inte i hudfärg eller bärandet av hijab. När elevernas språkförmåga och utbildning ökar accepteras de lättare av praktiklandskapets deltagare, vilket inkluderar bättre möjligheter till en tillsvidareanställning och högre lön. För att eleverna ska nå dit behöver de dock tillträde till och tid i en praktikgemenskap samt hjälp med att få syn på och kunna tolka dess normer och värderingar. En slutsats är att praktiklandskapet äldreomsorg behöver vara öppet för att ta till sig nya deltagare som ges tid att både observera och succesivt lära sig praktikgemenskapens normer, värderingar och arbetsuppgifter. Då kan ett lärande ske hos eleven som genom aktivt deltagande i en praktikgemenskap får tillgång till kunskap, som senare kan föras vidare till nya deltagare.

Om författaren

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Vocational competence demands and organisation of vocational education and training in times of rapid change: Automotive education in Sweden 1950–1960

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Abstract

This article examines the relationship between vocational education and training (VET) and workforce demands in Sweden during a period of rapid change. Using the automotive industry as a case study, it explores how VET adapted to technological advances and an expanding private market in the 1950s. The study investigates how school-level VET responded to evolving sector demands and the factors that enabled or constrained these responses. Drawing on curriculum theory, it analyses how educational governance shaped organisation and content. Empirical data from VET schools in three municipalities (1950–1960) show that local adaptations were frequent, enabled by school autonomy. Differences between schools reflected local market conditions, ranging from small workshops to large-scale industries. Close collaboration between employers and schools was essential in aligning training with labour needs. Overall, curriculum and organisational changes in this period illustrate a process of differentiation linking education to working life.

Keywords: automotive education and training, history of vocational education and training, post-war education, labour market, trade and industry



Introduction

The differentiation and specialisation of working life and vocational competence during the 20th century is a well-known phenomenon. These subjects have been empirically studied and theorised to understand societal change, labour market development, and the need for new knowledge and competencies in many (new) areas and sectors where the structure of work changes continually (e.g., Andersson & af Geijerstam, 2002; Braverman, 1985; Hylén, 2018; Reich, 2003). Over the past few decades, the landscape of automotive technology has undergone a profound transformation. From the 1950s to the present day, the field has evolved in response to advancements in vehicle design, diagnostic tools, and the integration of electronic systems. In the 1950s, becoming an automotive worker often required a strong foundation of knowledge in mechanical systems, with an emphasis on hands-on experience and intuitive problem-solving. Mechanics were expected to possess a deep understanding of traditional engines, transmissions, and brake systems, relying on their tactile skills and experience garnered through apprenticeships, as well as their theoretical understandings (Giertz, 1991; Kallerdal, 1995).

In the contemporary era, the automotive sector is characterised by the digital age and the increasing number of computerised vehicles. The competencies required to excel as an autoworker have undergone a significant shift since the 1980s (Giertz, 1991; Östling, 2021). The training paradigm has expanded to encompass a broader skill set, including proficiency in computer diagnostics, electronic control systems, and software interfaces. From the 1950s, technology and rational work methods allowed for rapid quantitative development, with a growing private sector and infrastructure for transport adding a quantitative demand to VET as well. This raises the question: How has the training of autoworkers evolved in relation to rapid development? This article aims to delve into the historical progression of autoworker training and investigate how formal vocational education and training responded to the rapid transformation of the market and automotive technology during the 1950s and 1960s when the automotive sector grew rapidly as cars became integral to private consumerism, and the transport infrastructure expanded. The development resulted not only in increased car production but also in an expanding number of repair shops for maintenance. A greater and more up-to-date workforce of autoworkers was required for large industries as well as for smaller businesses catering to the growing numbers of car owners and the increasing needs of the transport sector (Giertz, 1991; Östling, 2021). This article investigates the response to that demand by the Swedish national vocational education and training (VET) system as it was organised in the 1950s when Swedish industry and the economy expanded rapidly.

Research has contributed to an understanding of system changes in Swedish vocational education and training (e.g., Clark & Winch, 2007; A. Nilsson, 2010; L. Nilsson, 1981) as well as shifts in pedagogical ideas and practices (Broberg, 2014, 2016, 2020). The shifts have been investigated and understood in relation to developments in trade and industry as well as in relation to national education system development, and attention has been mainly on the period before and after 1971 when vocational education and training was incorporated into upper secondary education and the organisation of gymnasiums (non-compulsory education age 16–18). This article pays particular attention to this process in the automotive industry from an educational perspective by examining government-funded vocational schools in Sweden in the 1950s and 1960s. The aim is to show how VET responded to rapid changes in competence requirements as well as a rapid growth in demand for skilled autoworkers, through changes in curricula and in the organisation of VET at school level. The research questions this article addresses are:

- What were the perceived vocational competence requirements from trade and industry as well as societal needs?
- What educational responses to technical development and the changing demands of working life in the automotive industry can be traced in curricula and the local organisation of car mechanics' education?
- How were these responses conditioned by the particular system of VET at the time?

The contribution of this investigation is to broaden the understanding of the scope of action at school level to adapt curricula and the organisation of education to the rapid development of sectors such as the automotive industry.

Previous research

The relationship between VET provisions in relation to structural and technological changes and how these shifts have impacted vocational education and training has received limited attention in Sweden and internationally. This view is supported by the conclusion drawn in an in-depth literature review by a group of Swedish researchers (Rosvall et al., 2019). In industrialised societies, the educational system, particularly VET, has long been perceived as a critical institution for reliably providing a qualified and skilled workforce to meet the changing demands of the labour market.

The role of VET has been the subject of various European Council declarations, such as the Lisbon European Council Meeting and Declaration 2020, and the Stockholm European Council 2023 meeting. International cooperative bodies have emphasised the important role of education as an integral part of economic

and social policies and as an instrument for strengthening Europe's competitive power worldwide, thereby ensuring the cohesion of its societies and the advancement of its citizens. This role is emphasised by research in the field of VET from a variety of perspectives and vantage points, such as, its social and economic returns, productivity effects at the company level, the promotion of social cohesion, and as a remedy for youth unemployment (Kuczera & Jeoni, 2019; Lindell, 2004; Rauner & Maclean, 2008; Richardson & Van den Berg, 2002; Silver, 1994).

Thus, the importance of VET for economic and social development in society is clearly acknowledged in both research and politics, but in the proposals and claims, VET is commonly referred to as a general concept and general demands are made on the function of VET. Organising VET to meet competence demands as well as civic demands is a challenge for every nation, and it requires a highly agile system to do so. However, the complexity of demands at VET and its systemic abilities to adapt have not received as much attention in research and on policy level. As the work of Chankseliani and James Relly (2015) using the example of British VET policy suggests, demands on VET often compete and depend on a vast variety of factors but the policies often favour a one-size-fits-all solution. Given the diverse and partly conflicting societal demands placed on VET, uniform, system-wide solutions pose challenges, particularly in ensuring equitable and appropriate developmental conditions for the various occupational fields encompassed by the system. To further understand these challenges VET research would benefit from new approaches that focus on the differences of the inner workings of a system and compare what conditions mechanisms rather than systems themselves (Adolfsson & Alvunger 2020; Busemeyer & Trampusch, 2012; Markowitsch & Hefler, 2018). This study aligns with these approaches by focusing on the responsiveness in a VET system and the ability for change and development in relation to the frameworks set by the system organisation.

As noted above, while there is some research about structural changes and their relation to the development of the labour market in Sweden and in international comparative research there is still a scarcity of research that examines structural changes in relation to specific vocations and their changing educational needs. Studies from a historical perspective that have looked at the development of VET in different periods vary in their focus but generally describe shifts and developments on systemic level and over a long period of time (Broberg, 2014; Michelsen & Stenström, 2018; Olofsson, 2005; Olofsson & Panican, 2019). I argue that historical case studies can also provide an in-depth perspective on how systems cater to diversity, not only in terms of general demands but also in response to changing vocational-specific competence demands.

The general criticism of VET always seems to be the same, and one of the more or less eternal questions is how it can keep pace with developments in the industries to which it is supposed to deliver skills. A common way of both substantiating criticism and trying to find new ways to better organise VET, is to make international comparisons with other VET systems (Clarke & Winch, 2007; Greinert, 2005; SOU 1954:11). Another way to critically analyse persisting issues in VET is to compare historically how the education and training for one profession is shaped within the framework of a particular system. This enables understanding of how steering conditions the ability of VET to meet qualitative as well as quantitative demands from employers, the labour market, and society and at the same time reveals the complexity that hides behind the general conceptualisation of VET as one homogeneous institution. Since a large number of professions are trained and qualified within the same system, that is, with the same governance in the form of funding and rules, it is also important, in relation to the issue of skills supply, to compare training in sectors with different rates of modernisation. The automotive industry, compared to other industries, has experienced and is experiencing accelerated technological development.

This societal development of differentiation and specialisation in working life, has, as mentioned above, been historically investigated and theorised. The process is closely related to educational development and has been thoroughly studied within the history of education but mostly in relation to general education (e.g., Dahlstedt & Olson, 2013; Lindensjö & Lundgren, 2014; Marklund, 1985). For vocational education and training, this process is less studied and mostly on a structural level, that is, how the state acts and how large organisations and stakeholders are involved (Lundahl, 1989, 1993, 1994). But the process is also traceable at the school level in archive material and narratives from people caught up in the changes and involved in education. This kind of material reveals information about the practical measures required to meet the demands for further specialisation when having to work within given educational frames. This study investigates the actions of people involved in adjusting VET, and what measures were taken and why, according to perceived needs and with the means at hand. The focus is on changes in the content and organisation of VET at the school level for automotive workers.

Accordingly, this study examine the Swedish national vocational training system as a framework for conditioning autoworkers' training in the 1950s and 1960s with particular attention to the implementation level. It shows how the training changed at the school level to meet the demands and needs of the industry and market, and identifies examples of responsiveness, or flexibility enabled or restrained by the system of VET at the time.

Theory, method, and material

The purpose of examining the VET response at the school level, and the research questions about the kind of responses in relation to the conditioning by the system, are informed by a curriculum theory perspective. Curriculum theory emphasises how the governance of education shapes the conditions for organising education, as well as the selection and realisation of content in teaching. This is conceptualised through the notions of frames, steering, and arenas, and the analysis focuses on the dynamics of formulating policy and the realisation of it. Education is constituted and enacted at the school level – or the realisation arena – through actors' navigation of economic, legal, and ideological frameworks. The frames function as steering tools (to implement what is politically decided in the formulation arena) and mechanisms (when steering is more indirect and sometimes unintended). Rather than a linear process, policy implementation is understood as contingent upon the specific configurations of actors involved and the scope for action available within the institutional context. (e.g., Englund, 2005; Lindensjö & Lundgren, 2014; Nordin & Sundberg, 2018). In the case of vocational education and training, there are several institutions to which a specific education relates. Besides the government authorities and bodies there are also the organisations and institutions of employers and unions related to the specific trade. In different VET systems, these institutions are organised in different ways (Markowitsch & Hefler, 2018). Their means and influence are conditioned by the frameworks of the systems that also allow them access to different arenas. In the mid-1900s, the Swedish VET system positioned local school boards, led by the school director, as key actors in the implementation arena. Their scope of action was conditioned by the juridical, economic, and ideological frames of the system in place. The national vocational education school charter stipulated that the local school board should include an equal number of representatives from employers and unions, hence, labour market representatives were directly involved in school level organisation.

The empirical material representing the school level consists mainly of archive material from the local school boards in Stockholm, Gothenburg, Örebro, and Södertälje. The four municipalities had autoworker training in various forms, provided in close cooperation with local companies of different kinds. Operating in the regions of Stockholm, Södertälje, and Gothenburg were the large car and lorry industry manufacturers Scania and Volvo. Örebro is a medium-sized town, with many small businesses. But throughout Sweden, the private market for cars rapidly expanded from the 1950s and so did the need for car repair shops, which also impacted the demand for skilled workers in smaller businesses. Board minutes, teaching plans, internal investigations, and proposals make up most of the material used in this study. The school level is also reflected in anniversary and commemorative publications published by associations that wanted to

preserve the memory of various vocational schools. The material includes commemorative publications from Gothenburg vocational schools, Södertälje vocational schools, and Stockholm vocational schools.

To answer the research questions the source material is analysed thematically. Focus is on discussions, decisions, and negotiations relating to the organisation and content of car mechanics training and related vocations. The statements and actions represented in the material are then analysed, firstly, in relation to how different actors perceived the industry's skills needs and demands in the labour market. Secondly, in relation to the possibilities that governance provided for different proposals to be considered feasible (what made them feasible in relation to the frames of the system) and for decisions to be implemented (what resources could be used/activated within the frames of the system). The data was then analysed comparatively in relation to differences and similarities of the schools to understand how these were conditioned by the mid-20th century Swedish VET organisation. The references and quotes from the empirical material used in the article are translated from Swedish by the author.

Changing competence requirements and the labour market in the post-war era

In accordance with this study's curriculum theory approach, this section outlines the context of education of autoworkers, including a brief description of the national VET system of the period, and relevant societal aspects such as labour market conditions. It is important to note that the VET system in the 1950s and 1960s was structurally the same as when it was first implemented by government reforms in 1918 and 1921. In the 1940s, some changes were made, adding organisational features like regional schools, and a government authority only for VET was established. However, no comprehensive structural changes were made until 1971 when VET was integrated into the upper secondary school organisation along with academic tracks (A. Nilsson, 2010; L. Nilsson, 1981).

The so-called Swedish model structured relations between the parties of the labour market based on collaboration, negotiations, and collective agreements with limited government involvement (Andersson, 2000; Giertz, 1991). In the 1950s and 1960s, the conditions for economic growth changed and the welfare state was substantially expanded (Andersson et al., 2005). This period also represented a crucial turning point for the VET system. In the 1950s, changes in the organisation of the vocational education and training system were deemed necessary. The prevailing perception was that the existing system had become outdated in relation to technological developments. There was also a need to expand because of the growing number of applicants. The perceptions of the aims

and functions of VET also developed in relation to an ongoing massive reform of the general, national education system.

The VET system was to align with the planned changes in the educational system in general. Furthermore, vocational education and training was regarded as needing to adapt to the ever-accelerating changes in the production landscape. It was argued that this adaptation was essential for vocational education and training to fulfil a significant role socially and economically (SOU 1954:11; SOU 1966:3). Central to the perception of the need for new competencies were ideas on theoretical knowledge and flexibility. Hence, arguments for change focused on modernising educational content. The modernisation did not pertain only to the vocational aspects but to civic education as well, responding to the general idea of democratisation that underpinned the major reforms of the national education system. More time was allocated to general subjects such as modern languages, Swedish, and social science. One dimension of the content aspect that did relate to vocational education and training was the dimension of broadening the content and moving away from specialisation. Broadening the content and shifting the focus from vocational readiness to vocational preparation would create flexibility, thereby enabling workers to be mobile and adapt to different kinds of workplaces within a sector (Broberg, 2014; L. Nilsson, 1981).

The structure of the education system was also targeted, but this had more to do with aligning it to changes planned for restructuring the national education system as a whole from a parallel to a comprehensive system with democratic aims. It also meant making all VET programmes accessible everywhere in the country and moving away from the local character of VET offered. This idea put the student's choice in focus rather than the local trade and industries' needs (Broberg, 2014).

During the 1950s, government funding increased significantly and a new government act stressed the close cooperation between VET and trade and industry as well as regulation of VET, mainly in the form of deals between parties rather than legislation (Håkansson & Nilsson, 2013). However, at the same time that the new general education system was developed, legislation placed local vocational school boards under the authority of the centralised municipal school system, marking a step towards integrating VET with general education. Implementation at the municipal level was completed in 1960. This development did not go uncriticised by the local VET school boards as they feared a loss of connection with the local businesses (Broberg, 2014). In 1964, the national government body, the Royal Board of Vocational Education, was closed down and VET became a section within the National Board of Education. In 1971, all forms of vocational education and training were reorganised within upper secondary education along with academic tracks and centralised under the same government authority. All forms of VET became two-year programmes with no

preparation for higher education, and the academic tracks became three- or four-year programmes preparing for higher education. With this rearrangement, more than 300 VET schools were closed down around the country and large VET school complexes were localised to so-called 'G-orter', Gymnasium towns. The reform also entailed a new funding system that meant less or no support for the larger industries' own VET schools.

Vocational education and training system frameworks in the mid-1900s

Throughout history, VET has responded to shifts in competence demands by changing curricula and redefining the relationships between educators, students, and industry partners. Since VET systems comprise all kinds of vocations, organisational changes impact different for different vocational education programmes in different ways. The automotive industry is broad and is a sector subject to rapid adaptations to market conditions, technological developments, and stiff competition, which makes it an interesting case for analysing the VET response to changing conditions. This sector includes the car/lorry workshops of different makes of vehicles and privately owned car workshops, and a number of vocational and professional categories are connected to it, encompassing work tasks from low-skill to high-skill levels. In this article, these groups are referred to as autoworkers, meaning vocations that in some respect involve hands-on work with vehicles.

At the beginning of the 20th century, state involvement in vocational education and training was a way of strengthening the supply of skills to industry and crafts through control and responsibility at a time when the development of industrialism was beginning to take off in Sweden (Marjanen, 2019). The system that began to emerge after the 1918 practical secondary school reform was organised at the government authority level into three departments: craft and industry, commerce, and domestic education. Schools could be set up by different providers, could provide education in one or more of the department areas, and could be financed with state funds if the school undertook to comply with the state-developed vocational school charter. The vocational school charter provided a framework that included requirements for the preparation of curricula for the education to be provided. Curricula were mandatory documents for obtaining state funding but their content was not specified, other than a few required headlines. The charter provided a general plan for the content but not in any detail. This left substantial room for each school to decide on the particulars of the content for each form of education and also to change it according to perceived needs. Such actions were the responsibility of the VET school boards and associated committees. Thus, in the cases discussed in this

article, autoworkers' education was overseen by dedicated committees responsible for various education programmes related to automotive work.

The system was organised (in addition to the division into departments) into school forms and levels. The 1921 supplementary reform broadly covered (the number of variants developed over time was extensive) workshop schools, apprenticeship and vocational schools, industrial schools, and integrated schools.

In workshop schools, the same provider was responsible for both practical and theoretical education and the education was carried out in the schools' own workshops, often with production for sale to local companies or private customers. In apprenticeship and vocational schools (corresponding to basic and advanced levels respectively), the pupil was employed as an apprentice in a company to receive practical training, and only the theoretical training was provided by a school under some type of provider, municipal or private (from 1941 also regional authorities). For integrated schools, all vocational work within the framework of the training was outsourced by the provider to a company with which the school had an agreement. The model would mean that the company would provide premises or a specific location for practical teaching, equipment, and instructors with the qualifications of the Royal Board of Vocational Education and Training. The school was responsible for theoretical instruction and in some cases even teachers for the practical education in the company if the company did not have qualified personnel. State subsidies were paid on a fixed basis for both the company and the school. The pupils were enrolled at the school but paid by the company, which also received the margin on what the pupils produced (Broberg, 2014, 2016).

This plurality of organisational options left room for adapting to patterns of the local trade and industry. In the following sections, empirical examples of adaptations are presented and analysed.

The organisation of autoworkers' vocational education and training: Examples from the 1950s and 1960s

The manufacturing and maintenance of cars was based on skills traditionally found in tin smithing and general motor mechanics, building and servicing engines for industry, as well as motors for boats and the young car manufacturing industry in the early 20th century. Education for all the groups involved in making cars was provided at least in the larger communities by the 1940s, but with no specialisation targeting the automotive sector specifically. The earliest evidence found in the material for this article, pertaining to specialisation for automotive workers, comes from Örebro where the municipal VET school provided education for 'car assembly' (Örebro skolor för yrkesutbildning [ÖS],

F1:1 1918–1962). In the first decade of the century, not even a hundred cars were manufactured in Sweden. The early development of the industry relied on the transport sector for its customers, and it was not until the 1950s that the car became popular and affordable for the general public (Giertz, 1991). This was also when training specifically for car mechanics began. In the 1950s, vocational schools increasingly began offering specialised programmes in areas such as car mechanics, car assembly, tyre work, and automotive electrical systems.

Adjusting curricula and teaching methods

In the municipal VET schools of Stockholm, Södertälje, and Gothenburg the training of mechanics was divided into (general) mechanics and car mechanics in the mid-1950s; in Örebro this began as early as the 1940s. A sign of differentiation and expansion of the automotive sector was the establishment of new committees under the main school board for car mechanics and related vocations. Commenting on this change and decision by Stockholm VET, the school board saw it as essential because the car mechanic was turning into a ‘more specialised repair worker that increasingly bases his work on the manufacturer’s own ready-made spare parts’ (Lärings- och yrkesskolstyrelsen [LYS], A2A:30 1955). Later, changes in car manufacturing led to the emergence of the more brand-specific spare parts and along with this development education and training for the vocation of ‘spare part specialist’ was initiated in Södertälje (Yrkesskolan Södertälje [YS], 429:1, Protokoll 1946–1969).

To realise the shift from general mechanics to car mechanics, the headmaster of the Stockholm VET schools initiated an enquiry comparing the existing educational content and ‘changes in the local workshops’ to address both quantitative and qualitative needs of education for the automotive sector (LYS, A2A:30 1956).

An engineer named Walles was appointed to carry out the investigation and he presented his conclusions in a report in 1956. The conclusions concerned the length of education, the content of curricula, teaching methods, as well as the organisational effectiveness based on school-company cooperation. He based his conclusions on observations and interviews with vocational teachers, workshop owners, and car company representatives. In the other towns the same issues were discussed by the school board and subordinate committees and sometimes investigated in locally initiated enquiries on specific issues (e.g., YS, 429:1, Protokoll 1946–1969).

According to Walles’ enquiry, there was no reason for changing the duration of the education, which was two years in Stockholm VET schools (others, such as Gothenburg, had up to three years) but he saw a need to improve efficiency, particularly in the first year. Practical education/teaching needed to adapt to

specialisation. He argued that it was no longer possible to learn car repair by doing general mechanical work. First-year training in filing, welding, drilling, and similar skills needed to focus on car engines, with a shift in emphasis from general mechanics work to car-specific mechanical tasks. The current proportion was 950 hours of general mechanics and 460 hours of training on tasks directly relevant to car mechanics. Walles proposed that students should come into contact with a car engine, and also the specific tools used for car engines, from week two or three in the first year. He suggested building first-year education around a used engine, more precisely one engine per three students. They should start with cleaning and deconstruction, followed by renovation (including all accessories of an engine), assembly, and a test run.

In sum, the enquiry proposed faster specialisation and more specialised training tasks and Walles concluded that: 'By the end of the first year, the students should have had time for a complete review and renovation of the car engine, clutch, gearbox, reverse gear, etc.' (LYS, A2A:30 1956)

In addition to training general skills such as filing and drilling with a focus on car parts as a specialisation, the amount of time allocated to certain tasks was also reconsidered. In minutes from both Stockholm and Gothenburg the amount of welding training was reassessed in relation to car work as opposed to general mechanical work (Göteborgs yrkesskolor [GS] 320-1, A3:2 1932-1963; LYS, A2A:30 1950-1963). In Stockholm, it was estimated that in current mechanics education, welding accounted for 14.5% of the training, which was argued to be 'almost complete training for welders' and completely unnecessary for the welding requirements that a car mechanic has' (LYS, A2A:30 1950-1963). In Södertälje, welding was also questioned and taken away entirely during the 1950s but by 1962 it had been reassessed on account of statements from the vocational teachers who argued that representatives of the automotive sector 'remarked that [...] a car mechanic that can't weld has a major handicap' (YS, 429:1, Protokoll 1946-1969). Also, in Örebro requests from companies about welding education were again taken up by the board and organised in 1965 (ÖS, A2:1 1939-1965). This indicates difficulties in defining vocational competence within a highly differentiated sector, subject to changing demands over time due to ongoing diversification. There are no references in the Södertälje material as to why the perception of welding skills changed 12 years after it was viewed as unnecessary. But education for car tinsmiths was specifically referred to in the Södertälje material during the 1960s which suggested a branched-off educational pathway, with welding potentially integrated into this specific programme as part of ongoing specialisation efforts. However, in 1964 the question re-emerged, and the director of studies was given instructions to enquire among the local businesses about the need for welding skills as a car mechanic. In 1965, the enquiry was presented and the director was given instructions to further

investigate the possibility of creating a short welding education programme for car mechanics.

In 1956, the curriculum for apprentice education in Örebro stated in the introduction that the students would be named 'bilmontörlärling' [car assembler apprentice] and defined this as: 'someone who, during the apprenticeship period [...], trains in a vocational school and car workshop according to a defined plan in car mechanical and electrical workshop work and assembly work' (ÖS, F3:3 1945–1964). This suggests a more all-round education, contrary to, for example, the specialisation in Stockholm. On the other hand, the education was extended from three to four years. Curricula were detailed, and all subjects or areas of knowledge and training were directed towards working with cars. A more general subject, such as tool forging and hardening, was specified with the addendum that: 'In order to support the apprentice's specialisation in the automotive mechanics profession, automotive tools and parts for engines, clutches, gearboxes, etc. are manufactured as needed.' (ÖS, F3:3 1945–1964) However, analysing the content descriptions under headlines like 'Filing', also shows training of generic craft skills, like the ability to sharpen tools through filing. In addition, the content encompassed an understanding of materials, including not only their technical and physical properties but also the 'history of metals,' reflecting a traditional crafts-based *Bildung* approach to developing the required competencies. The importance of the history of metals should, of course, not be overstated, but it is interesting in relation to the traditional apprenticeship education that Örebro VET schools chose and as a counterbalance in a process of increasing efficiency – one that might otherwise have seemed focused only on the immediate needs of the workshop floor. In addition, all VET curricula during the 1950s (and many even earlier) contained civic education through the subject 'vocational hygiene' and social science, although adapted to relate to the worker conditions and vocational specifics (Broberg, 2014; F3:3 1945–1964). The four years of education were divided into periods of in-school workshop and apprenticeship time in a company, and 39 of 45 hours per week were dedicated to practical education (F3:3 1945–1964).

According to a minute from 1955 from Gothenburg VET, specialisation demands were not always unanimous within the committees or between committees and boards. One board member expressed his excitement with a decision to expand car mechanics education with new classes at new and old sites, but remarked that the education was not sufficiently specialised. Another member compared it with Volvo's education but thought that the conditions were not comparable to the municipal schools and the deputy headmaster agreed with the argument that young students (around 15) should not specialise but rather should have a broad study base in the beginning, with specialisation taking place in the third and final year. In Örebro, the added fourth year had the

same purpose. The deputy headmaster also referred to the development of general education and the need to adapt to eventual changes when the nine-year compulsory education was implemented. However, this had more to do with giving students options within the growing sector than any civic educational intention for young men (GS 320-1 A3:2 1932–1963). The different views within school boards indicate a complex situation where perceptions of skills need depend partly on the sector representative's own experience but also on ideas about education in general in relation to the ongoing development of primary education.

New pedagogical approaches catered to the need for specialisation, but also represented a means to meet quantitative demands from both the automotive sector and potential students.

Adjusting the organisation of education to meet qualitative and quantitative demands

Increased effectiveness of education was needed to meet the quantitative demands of skilled workers in the growing automotive sector. In 1963 the committee of car mechanics in Stockholm VET schools and representatives of the companies decided to work together in applying new pedagogical methods including the so-called 'station-teaching'. It was decided that they would collaborate in 'creating audio instructions, suggestions for training stations, curricula and producing all equipment required for the education' (LYS, A2A:30 1950–1963).

The new didactical approaches were seen as a way of shortening the period of education and thus being able to offer more of it. From different reports during the 1960s, it is evident that the VET schools' capacities were far from able to provide for the increase in both labour demand and youth interest. To cope with the demand, not only were pedagogical methods adjusted, but also the organisation and delivery of VET for automotive work were adapted.

During the 1950s and 1960s, there was a constant shortage of education opportunities within the automotive sector. The need for car mechanics was probably as great as the interest in car mechanics education but the schools had trouble providing training posts, mainly because of a lack of facilities. In the larger cities of Stockholm and Gothenburg plans for vocational school buildings were already being made in the 1940s, and when more government money was allocated to the whole VET system, the schools increasingly built their own facilities with large areas for workshops of different kinds as well as traditional classrooms.

By the time of the Stockholm investigation by Walles, there were three schools with car mechanic education in the organisation comprising Stockholm VET

schools. During this period there was a higher demand for car mechanics than motor mechanics. A spike in union membership among car mechanics was noted by the board. In Stockholm alone, there were 2000 car mechanics union members, and this number rose to about 2500 when including the estimated number of non-members. The Royal Road and Water Board (Kungl. Väg- och vattenbyggnadsstyrelsen) estimated the increase in motor-driven vehicles by 1961 at 10–12% yearly. The board came to the conclusion that the demand for car mechanics was around 8% of the current workforce every year during this period, resulting in the need to train 300–325 students per year for the next five years and 200 thereafter. Based on these numbers, the board agreed on rearrangements of schools to meet demand (LYS, A2A:30 1950–1963).

The board suggested making one of the schools for (general) motor mechanics into a car mechanics' vocational school. Similarly, Gothenburg reorganised some of their existing mechanics education into specialised car mechanics education and planned to open more schools when issues concerning facilities could be resolved (GS 320-1, A3:2 1932–1963).

Södertälje municipal VET started a three-year car mechanics education programme in 1953 with five or six students admitted per year, and by 1959 the capacity had expanded to 16. In 1962, the board noted that this was not enough. The reason was that car companies in the area were considering starting their own education programme to solve the problem of skills shortages. Södertälje VET school decided to expand by reorganisation. To double the capacity the board decided to organise the education programme with only the first year in school and both the second and third years with an 'in-built-workshop' (training outsourced to a local company's workshop but with teaching provided by the school) as opposed to only the third year. Thereby, space in school was freed up to admit more first-year students (YS, 429:1, Protokoll 1946–1969, 1961–1969). The demand for automotive workers for heavy vehicles posed a problem for Södertälje VET schools, and again it was mainly due to a lack of facilities, and the solution was to let the companies take on responsibility for this kind of automotive education (YS, 429:1, Protokoll 1946–1969, 1961–1969).

In Örebro, new specialised education programmes were also started, merged, and reorganised to meet demands. Along with car mechanics, there were also dedicated sections for spare parts, rubber- or tyre and wheel workshops, and car electricians. Depending on the number of applicants, the needs of local companies and the school budget, courses were branched off or adjusted in different ways. The school boards frequently handled requests for students from local companies. In the minutes from Örebro vocational schools in 1965, the headmaster stated that 'the companies had reported the need for 23 car mechanic students and 10 spare part specialist students'. Since the number of applicants for car mechanics was 31 the school opted for exchange education (having some

students in school and some at companies, switching periodically) and the method of station education when in school. In that way they could both provide for the local companies and admit all students.

In 1953, the board of Gothenburg VET anticipated a 25% increase in the demand for car electricians in the coming years. The lack of facilities made it hard to start a day school. A temporary solution was to have evening classes as further education for workers in the sector but at the same time, it was recognised as a problem to attract youths and cater for future needs. Courses for experienced workers represented a form of education open to employed workers so they could develop skills within their field. It was the equivalent of adult education. The board's efforts to acquire facilities finally paid off in 1955. The problem of acquiring facilities was common in all four schools. In a report from the school in Örebro, it was identified as the most important obstacle for expanding VET (ÖS, A2:1 Övriga protokoll 1939–1965).

Acquiring facilities to expand education was one solution, while another involved organising programmes that relied on close collaboration with local companies. The previously mentioned car assembly education that started in Örebro during the 1940s was mentioned again in 1954. According to the minutes of the school board, this education had been dormant for some years but representatives of the workshops in town still saw the need for education and proposed it to be organised as a special course 'within the car electrics field' (ÖS, A1:2 1940–1955).

In 1944, the central workshop school with the county council as the provider had taken over the early car mechanics training. This was not entirely welcomed by the municipality, probably due to competitive reasons, both in terms of students for the courses and in terms of cooperation with local businesses.

In 1965, Örebro opted to start an apprentice school. From the details of the proposal, it is clear that this reorganisation demanded close cooperation with multiple actors from local trades and industry. Seven local companies were engaged in creating content and providing training and collaboration in a special committee with the school board. This special committee then proceeded to meet regularly to oversee the education (ÖS, A2:1 1939–1965).

As school providers could organise the same vocational education in different ways Örebro also had integrated schools for car mechanics. Like the apprentice school, this also called for close collaboration between schools and local companies. In 1965, an imbalance arose as the number of applicants to integrated car mechanics schools exceeded the capacity of companies to accommodate them. To address this, the school implemented 'exchange education,' where some students trained in company settings while others received training in the school's workshops. In this way, they did not have to turn down applicants,

which was in the interest of both the school and the sector's future needs (ÖS, A2:1 1939–1965).

Like Örebro, Stockholm and Gothenburg provided car mechanics education in different forms, depending on collaboration with the region's companies. In 1956, nine integrated schools were reported to have started in Stockholm (LYS, A2A:30 1956). In total, 115 students were enrolled in this form of education for car mechanics during the spring of 1956.

In all cases, school and local trade and industry worked closely, and the school board meetings as well as other meetings and specially initiated committees were regularly attended by representatives of companies with an interest in the potential workforce. But representatives and actors from the employer side were not the only ones concerned with the education; in fact, the national vocational charter demanded equal representation in the school boards from trade and industry and workers. Moreover, as exemplified in the Stockholm VET school case, requests and enquiries regarding suggestions for organising education went out to local divisions of concerned unions. In minutes from the early 1960s of Stockholm VET schools, it is evident that the board collaborated not only with the companies but also with the union in matching education to needs. For decisions concerning the reorganisation of forms of car mechanics education, the union was asked to contribute their opinion (LYS, A2A:30 1962).

Not only did automotive education of different kinds branch off from mechanics, education for car painters branched off from painters' VET, and education for car electricians from general electricians' VET. From the minutes of Södertälje and Gothenburg VET school boards it is possible to identify a pattern of branching off, merging, and reorganising using the assets within the school. In Södertälje, car mechanics, car painters, and car bodywork specialists were separated from the original education programmes, then specialised and consolidated within the same area, creating a hub of automotive education (YS, 429:1, Protokoll 1946–1969, 1961–1969). Having automotive courses operating in close proximity was advantageous for educational as well as productive reasons as customers had access to a full-service centre. In Gothenburg, car electricians, car mechanics, and tyre workers were located in the same area (GS, 320-1, A3:2 1932–1963).

Another way of connecting courses was through curricula and co-education. In 1963, the board of Stockholm VET schools decided to organise a special education programme for car electricians, featuring a foundational year alongside car mechanics, followed by a two-year specialised programme in an integrated school. This structure effectively connected or created educational tracks from basic training to specialisation (LYS, A2A:30 1963).

Concluding remarks and a tentative discussion on shifting conditions when reforming a system

During the 1950s and 1960s, local VET school boards investigated and discussed the perceived need for increased efficiency, specialization, and differentiation. Traditional courses in areas of mechanics, electrics, painting, and even working with vulcanised rubber were tailored for the automotive sector. Named with prefixes indicating the automotive specialisation, new courses with new curricula were created and organised in various ways. Old content was rearranged in terms of focus and time allocation, the order of learning tasks was shifted, and new pedagogical methods such as the 'station method' were implemented. Although examples of these changes are found in the four schools, their extent and timing varied to conform to local needs and conditions.

The skills described in the material during this period can be characterised as hands-on mechanical skills but the suggested changes, for example at Stockholm VET schools, focused on learning about specific car parts rather than any piece or part, in order to develop skills in cleaning, filing, drilling, and screw driving when taking apart and reassembling a motor and in problem localisation. The examples suggest an initial step towards specialisation: a kind of 'product-based specialisation,' such as car assembly (focused solely on car and car part assembly) and car painting (dedicated exclusively to painting cars).

According to the national vocational school charter in the mid-20th century, the board of a vocational school was to consist of equal numbers of representatives of the employer and employees. Both categories brought with them extensive connections with the local market through personal relations and networks. This is evident in how actors outside school were engaged in monitoring and reporting the needs of the sector. In towns like the ones in this study, municipal VET encompassed a large number of vocations and the organisation was therefore divided into smaller units referred to as committees: for example, a car mechanic committee, and a car electrician committee. Forming committees was a way to branch off and to specialise and tailor the content, teaching, and cooperation with local trade and industry, leveraging the resources of the members' contacts. The 1954 reform merging VET school boards into the municipalities' general school boards was met with opposition from the VET schools of Stockholm and Södertälje. Earlier, some discontent with regional authorities taking over some car mechanics education can be noted in the Örebro school minutes. The arguments were the same as those against any centralisation; opponents feared losing the close relations with the local companies.

On the whole, examining the minutes of the schools in this case, cooperation with local trade and industry was not without problems but it was extensive and enabled swift adaptations of education both in content and organisation. All of

these initiatives were taken and carried out by the local school board and committees.

Organisational adaptations of education were also implemented to meet application pressure and meet the workforce demand from the local trades and industry. In some cases, the boards opted to turn workshop schools into apprentice schools or integrated workshop schools. This meant closer forms of trade and industry education where costs were shared with the local trades and industry. Although government funding for VET increased during the 1950s and plans were implemented for VET school buildings enabling in-school education, the financial framework and lack of appropriate facilities at this time still encouraged cooperative solutions. However, there were also still pedagogical arguments upholding the forms of education located at workplaces (Broberg, 2014). Also, based on the argument that workshop schools (school-based training with production) were perceived as less attractive to students, education was reorganised into integrated schools, or apprentice schools in the case of Örebro.

Crucial to these organisational activities was that decisions could be made at the local level according to supply and demand from students and local trade and industry alike. The juridical steering of the vocational school charter decentralised decision making, by empowering actors with sector-specific competence and local networks that could be utilised for developing courses and expanding VET in the region.

System changes and reorganisation of actors in the realisation arena

Developments in the 1950s and 1960s remained in the 1970s such as a large private market for cars and continued expansion of infrastructure and transport while an ongoing and growing centralisation in society transformed many sectors.

In 1971, the national education system was not only responding to changing competence demands in vocations, it also aimed to develop society in a more democratic and equal way. The influence of general education on VET implied more general subjects for more civic education. Although the perception in the educational debates seemed to be that there was no civic education in VET at all, the general curricula of the former VET included subjects such as vocational hygiene and social science and the 'history of metals'. By the 1950s, physical education was also included.

A shift in the automotive sectors development came in the 1970s. Automation and the use of industry robots became more frequent, and this shift implied that, for example, the skills of drilling accurately and sharpening a drill were still in demand but not needed everywhere in the sector. However, being able to programme and operate the robot to do the drilling was a new requirement. The new skills for computerised work were taught in more academic tracks but

automotive work still required vocational education and training for assembly and repair workshops. Perhaps it is this kind of asymmetry over time and space that is represented in the issue of welding that was so differently perceived and handled by the schools in this investigation.

In creating education there will always be conflicting demands and ideas about what education is and should achieve (Evet, 1978) because a curriculum is a limited space. The aim of the 1971 reform to create better vocational education (adapted to both the modern labour market and civic education requirements) in less time resulted in rationalisation and centralisation. The diversity of curricula in VET was perceived as a problem, as were the local adaptations (Broberg, 2014; L. Nilsson, 1981).

Democratisation meant the possibility for the individual to be able to attend the same course anywhere in the country. Rationalisation meant that curricula should align with national sectors rather than be adapted locally. New subjects responding to the demand for more civic education reduced the vocational content. Thus, on the one hand, it seemed that the state took on the whole responsibility for VET, but on the other hand, it became less vocational. The responsibility to meet demands from differentiation and specialisation was passed over to the trades and industry without the platform of close cooperation with the schools in the area. The local boards had gradually been subordinated to the educational authorities of the general municipality, and in that process, many board members connected to the local trades and industry lost influence over education, and the close personal contacts between schools and companies were weakened (Broberg, 2014). By the 1971 reform, labour market representatives' participation was reorganised in line with the centralisation of education and located closer to the formulation arena than the realisation arena.

The ability to adjust to demands within a sector by changing the organisation of education was limited by the centralisation in 1971. The arguments for centralisation, broadening and shortening vocational programmes tended to favour the production of flexible workers rather than promoting flexible vocational education. Even though the decentralisation of the 1990s and the marketisation of the 21st century in some ways have transferred decision-making down to the local level and schools are marketing themselves with specific orientations of national programmes, the frameworks of VET are considerably different from the 1950s and 1960s and recent research points to the emergence of a re-centralisation challenging the scope of action for the local school authorities in new ways (Adolfsson & Alvunger, 2020). Since the process of specialisation in vocational areas is ongoing and a mismatch between labour market demand and education is a growing problem, aiming for plurality in a standardised model may be difficult. In light of the results from this study, Chankseliani and James Relly's (2015) call for complex cooperation and new

ways of sharing responsibilities for VET, may be informed by historical cases that illustrate how complexity has manifested – especially in the methods and conditions used to align VET with shifting competence requirements.

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Unlocking hidden resources: The role of gaming skills in fostering career adaptability for resilience in the career planning of young people

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Abstract

This study examines how commercial video games can serve as informal learning spaces that promote adolescents' career adaptability, a crucial resource for effective career planning and resilience. Drawing on career construction theory, we examine whether skills developed through gaming align with career adaptability resources and how these resources influence adolescents' ability to recognise and apply such skills. Using structural equation modelling with data from 265 students aged 13–15, we find that gaming supports the articulation of adaptability-related skills, particularly among those who seek social support in career planning. Significant gender differences emerged: male students were more likely than females to identify career adaptability resources in gaming, which in turn facilitated the transfer of gaming-related skills and insights to real-life career planning. Game-based career counselling may therefore be a promising approach to reveal latent adaptability resources, strengthen digital competences, and enhance resilience – especially in contexts such as Switzerland or the Nordic countries, where vocational education and training (VET) systems face gendered participation patterns, high dropout rates, and increasing demands for transversal and digital skills.

Keywords: career adaptability resources, video games, informal learning, adolescents, career planning, resilience



Introduction

Career planning is a demanding and stressful task for adolescents, making the availability, use, and navigation of various resources critical to overcoming this challenge (Haenggli & Hirschi, 2020; Hobfoll et al., 2018; Savickas, 2013). These resources develop and rely on external support systems (e.g., teachers, parents, or career counsellors) and internal prerequisites (e.g., self-efficacy, transferable skills, or self-concept clarity) and add to the resilience of adolescents (Hirschi, 2012). Competencies that young people develop through playing video games are, until now, often not seen as valid resources and have received limited recognition within the context of career planning; they often remain hidden or undervalued. Yet, in engaging with commercial video games, young people participate in informal learning environments where they acquire a range of competencies to achieve in-game objectives. These competencies, while relevant, are seldom considered in formal career guidance processes (Rochat & Borgen, 2021). Bridging this gap requires a closer examination of how these informally acquired competencies might align with established concepts, like the career construction theory (Savickas, 2013). Today, young people are expected to design their careers self-directedly and individually. Designing one's career has gained significance, imposing the need to cope flexibly with different career planning tasks and adapt to internal and external circumstances (Savickas, 2013).

In this context, career adaptability resources are gaining increasing significance (Savickas, 1997). These are defined as 'the self-regulation strengths or capacities that a person may draw upon to solve the unfamiliar, complex, and ill-defined problems presented by developmental vocational tasks, occupational transitions, and work traumas' (Savickas & Porfeli, 2012, p. 662). Such resources are particularly vital during the transition from school to work, which can be challenging for students. Therefore, examining the competencies developed in video games may prove beneficial. This paper explores the potential of competencies gained through commercial video games to contribute to the development of career adaptability resources.

In light of these considerations, supporting adolescents in identifying and navigating resources becomes increasingly important, as it may alleviate the stress associated with career planning (Hirschi, 2008; Ungar, 2005). In career guidance, counsellors and teachers often foster an awareness of skills developed in leisure activities to support adolescents in becoming aware of resources (Rochat & Bodoira, 2016). Adolescents are frequently asked to reflect on their extracurricular activities in sports, the arts, or scouting groups. Seldom, however, are they invited to think about the skills they develop while playing video games (Rochat & Borgen, 2021). This highlights a contradiction: while playing video games is prevalent among young people, especially among male students, in many parts of the world (Entertainment Software Association, 2022; Külling et

al., 2022), these activities are largely ignored and underestimated, which often results in them being overlooked as a potential informal learning environment for career planning. Aware of this discrepancy, Rochat and Armengol (2020) presented various methods for integrating video games into counselling settings. They adapted the career construction method (Savickas, 2015) from the life design approach (Savickas et al., 2009) to the experience and lifeworld of video game players.

Recognising such informal skills may be particularly valuable in education systems with high VET participation, such as Switzerland and the Nordic countries, where supporting smooth career transitions remains a policy priority (OECD, 2023). At the same time, both contexts continue to face persistent challenges in retaining students and ensuring successful transitions (Bundesamt für Statistik, 2023; Cedefop, 2014a-e). Building on this idea, a game-based learning approach that utilises gaming experiences for reflection and skill development has already been tested for new students in Norway who are transitioning from upper secondary to university. Using a specially developed game, informal learning was encouraged through a playful approach, fostering student reflection and resilience and aiming to lower drop-out rates (Susnic, 2024). Self-reflective practices help students become more resilient and better equipped to handle career transitions by cultivating the ability to assess their strengths and areas for growth. This approach aligns with the World Economic Forum's (2023) emphasis on adaptability and resilience as critical skills for future employability. Integrating these practices early in education, particularly through innovative methods such as game-based learning, can unlock potential skills that support career planning and prevent dropouts. The potential of the game-based learning approach by Rochat and Armengol (2020) has now been empirically investigated in this study.

In this article, we aim to shed light on potential hidden resources for fostering career adaptability in response to the demands of career planning, specifically focusing on the skills that young people acquire through commercial video games. This study examines whether young individuals can identify skills gained from video gaming and if these skills can be categorised based on Savickas's career adaptability resources framework (1997).

Following Ungar's (2005) concept of resilience – the ability to navigate and negotiate for resources that support well-being – we explore how this capacity for building resilience manifests within gaming. Primarily, we investigate whether the navigation of internal psychological resources and external social support, which are crucial for resilience in career planning, is reflected in gaming experiences. Additionally, we examine how young people's resource-seeking behaviours influence the gaming skills they identify within the career adaptability framework and how these skills may facilitate the transfer of

learning from gaming to career planning. By doing so, we intend to uncover hidden resources in the gaming world that promote resilience and adaptability, which are increasingly essential for navigating the complexities of contemporary career planning and vocational education and training (VET). While our empirical focus lies on Switzerland, these issues resonate more broadly, particularly in the Nordic countries where VET systems face comparable challenges of dropout prevention, skills mismatches, and the need to prepare young people for rapid economic and digital transformations (Cedefop, 2014a–e; OECD, 2023).

Theoretical approach

In this section, the key theoretical concepts include career adaptability, resilience, and game-based learning. Before outlining these concepts, it is crucial to address the challenge of career planning to highlight the specific difficulties that young people encounter when designing their careers.

Challenge career planning

In today's dynamic and rapidly changing world, career planning has become a complex and stressful task for adolescents: It requires a high level of adaptability, self-efficacy, and resilience to successfully navigate the uncertainties and potential crises that characterise contemporary career pathways (Haenggli & Hirschi, 2020; Savickas, 2013).

The OECD (2021) reports that career planning at the age of 15 is becoming increasingly challenging. Only a dwindling number of young people can formulate firm career aspirations for their 30s. One possible explanation for this phenomenon is that the freedom of choice and the necessity of coping with numerous options, opportunities, and challenges simultaneously provoke ambivalent and overwhelming emotional responses in many young people (Ewinger et al., 2016; Schicke et al., 2014).

Alongside this, career planning must be viewed as a coping process, with young people expected to actively overcome challenges and navigate various resources (Herzog & Makarova, 2020). Consequently, in nearly all educational systems, young people are expected to independently plan and design their careers at a young age by selecting their career path at the end of lower secondary education (OECD, 2021). Thus, there is a significant pressure on young people to find early certainty within themselves amid external uncertainty.

Adolescence is a significant stage of change during which individuals face a series of developmental tasks. According to focal theory originating from youth research, the stress related to career planning can be understood as a result of adolescents needing to manage multiple tasks simultaneously rather than

sequentially (Hollingworth & Jackson, 2016). One of the critical processes that adolescents must navigate is career planning.

Dropout prevention and career readiness in VET: A Swiss-Nordic comparison

Young people often face the pivotal decision of choosing between vocational and general education for their upper secondary studies – a choice that significantly shapes their transition from school to the world of work. In this context, analyses demonstrate that students who successfully transition to upper secondary education are more likely to achieve higher qualifications and stable careers; conversely, difficulties during this phase can negatively impact educational progress (Scharenberg et al., 2014).

OECD (2023) figures show that approximately 87% of students in general education successfully complete their courses, compared to only 73% in vocational tracks. This disparity highlights the unique challenges faced within vocational education and training (VET) and the higher drop-out rates associated with these programmes. Compared to their peers in general education, VET learners often encounter a faster and more demanding transition into the workforce, due to their earlier and more direct exposure to real-world work environments and the resultant need for immediate professional readiness (OECD, 2023).

This challenge is particularly evident in countries like Switzerland, where over 65% of students choose vocational pathways. Switzerland faces a dropout rate of approximately 25% within the first year of apprenticeships (Bundesamt für Statistik, 2023; gfs.bern, 2024). There are various reasons for this, including external factors such as a limited range of apprenticeship options, which often leads young people to accept positions out of necessity rather than genuine interest – frequently resulting in poor fit (Schmid & Stalder, 2008). Internal factors such as underperformance in school or at the workplace may also play a role. Some young people struggle to seek social support when facing difficulties, underlining the importance of fostering their ability to actively reach out for help (Schmid & Stalder, 2008). However, between 60% and 80% of those who drop out find their way back into the vocational education system, often by switching to another apprenticeship, profession, or training pathway, and can still achieve upper secondary qualifications (Bundesamt für Statistik, 2023; OECD, 2023). Consequently, supporting a smoother transition into vocational pathways is essential for reducing drop-out rates and ensuring VET students can thrive in their chosen fields. Therefore, Switzerland has embedded career guidance at the lower secondary level, to facilitate informed career choices, framing it as a joint responsibility shared by schools, families, national counselling services, and industry partners (D-EDK, 2016).

A similar yet distinct set of challenges can be observed in the Nordic countries – Norway, Sweden, Finland, Iceland, and Denmark – where VET faces high dropout rates, skills mismatches, and a continuing struggle to adapt to global economic change (Cedefop, 2014a–e). A gendered aspect further complicates the situation: male learners are overrepresented in sectors like construction and industry, which typically have higher dropout rates, while females tend to concentrate in fields such as health and social care (NIKK, 2022). In response, Nordic countries have implemented a variety of strategies aimed at enhancing student retention and support. These include Sweden's use of personal development plans (Larsen & Thunqvist, 2018) and Finland's targeted dropout prevention programmes (Vehkasalo, 2020) which aim to provide more tailored and responsive educational environments.

Not only is dropout prevention a key concern in Nordic countries, but the nature of demands within VET also differs significantly from systems like Switzerland's. In the Nordic context, vocational education tends to be more school-based and places greater emphasis on fostering transversal competencies such as self-reflection and self-directed learning. Increasingly, digital tools – such as simulation-based reflection and coaching – are being used to strengthen students' emotional well-being and to prepare them for the evolving demands of a digitalised labour market (Dahlberg & Gustavsson, 2024; Kaper et al., 2024).

Despite these supportive measures, students who drop out of secondary education and fail to re-enter either the workforce or the educational system are at risk of becoming NEET (Not in Education, Employment, or Training) (OECD, 2024). Early NEET status can lead to long-term disadvantages, including lower earnings and reduced life satisfaction (Parola et al., 2023; Ralston et al., 2022; Scharenberg et al., 2014). Young men aged 15 to 17 are particularly overrepresented in the NEET category due to higher dropout rates and difficulties transitioning from compulsory schooling to stable vocational pathways (Hupka-Brunner & Meyer, 2023).

Given these evolving demands, it is essential to proactively reduce dropout rates and prepare young people for modern VET by developing key skills early, at the lower secondary level. These foundational skills should support well-informed career planning, promote self-directed learning, and enable young people to navigate available resources effectively.

Navigating resources for resilience: Search for social support and self-efficacy

In general, resources are objects, states, conditions, or other things that help people to achieve a goal or overcome a stressful situation (Halbesleben et al., 2014). Both conditions apply to young people in their career planning. They must

attain certain goals, such as finding a follow-up solution after lower secondary school, and various stressful situations may arise. These can include the first rejections from applications to schools or internships, the feeling of not fitting into any profession, or feeling unwanted by anyone. Therefore, it is beneficial for young people to navigate resources during times of frustration (Hobfoll et al., 2018).

Career planning relies on external resources, such as social support from parents, teachers, or counsellors, as well as internal resources, particularly psychosocial strengths like self-efficacy (Haenggli & Hirschi, 2020; Hirschi, 2012). To reduce stress and strengthen resilience, young people need to identify and navigate available resources actively (Dueggeli et al., 2021; Halbesleben et al., 2014; Ungar, 2005), thereby taking an active role in shaping their career prospects (OECD, 2024). Accordingly, Ungar's conceptualisation of resilience is appropriate for this context, as it situates the person as a central figure engaged in a proactive and dynamic role. Ungar (2006) defines resilience as the capacity of people to navigate their way to the psychological, social, cultural, and physical resources that sustain their well-being and their capacity to negotiate for these resources. Thereby, it is possible to compensate for a lack of resources in one area by utilising resources from another area. Especially navigating resources at school, for example, using career guidance, can, at least to some extent, reduce social inequality (OECD, 2024). Young people from lower socioeconomic backgrounds with fewer material resources can significantly improve their career prospects by engaging in career guidance they find beneficial, as reported by the OECD (2024). Career guidance serves as an external social resource in career planning, where educators, counsellors, and parents provide information, emotional support, and practical advice based on their understanding of the young person's interests and abilities (Ginevra et al., 2015). Such social support can profoundly impact young people's career adaptability (Wang et al., 2023), as well as their well-being and resilience (Azpiazu Izaguirre et al., 2021).

The significance of external support is crucial; however, internal resources such as transferable skills and psychological abilities, including self-efficacy, are equally important for young people's career planning (Hirschi, 2012). According to the life design approach (Savickas et al., 2009), adolescents must navigate these internal resources to address the challenges that arise during career planning in the 21st century. These resources include abilities and attitudes that help individuals cope with difficulties, manage career transitions, make informed choices despite perceived risks, and maintain an optimistic outlook for their future personal and professional development (Vilhjálmsdóttir, 2015). Self-efficacy plays a critical role in career planning: it influences expectations regarding career outcomes and, consequently, behaviour throughout the process (Lent et al., 2017). For example, those with high perceived self-efficacy tend to trust their

abilities in the face of adversity, demonstrating greater perseverance and resilience when confronted with difficult situations (Bandura, 1977; Schwarzer & Warner, 2013). Furthermore, young people aged 13–15 with higher self-efficacy typically face a lower risk of unemployment later and report higher levels of job satisfaction in adulthood (Pinquart et al., 2003).

Effects of gender on navigating resources

Upon examining gender differences in navigating diverse resources, it becomes evident that female adolescents generally tend to rely more on social support. (Kneavel, 2021; Öztemel & Yıldız-Akyol, 2021; Rueger et al., 2008), which significantly benefits career adaptability and career planning (Hirschi, 2009; Öztemel & Yıldız-Akyol, 2021). Regarding self-efficacy, studies indicate that male students typically exhibit greater goal decisiveness and stronger capability beliefs compared to female students (Hirschi, 2009). Furthermore, female students are affected by the phenomenon of stereotype threat, especially in STEM (science, technology, engineering, and mathematics) fields, leading them to feel less confident in their skills in these fields compared to their male counterparts. As a result, they perceive themselves as less self-efficacious and are less inclined to consider careers in these domains (Tellhed et al., 2018; Widlund et al., 2020). These gender differences suggest that targeted interventions may be necessary to help students recognise and navigate their resources for career planning.

Career adaptability resources for resilient life design

The life design approach appears to be a promising theory that assists young people in planning their careers during rapidly evolving times (Savickas, 2012). The concept describes career development as a process in which individuals actively shape their careers, utilising personal narratives to form their professional paths and give meaning to their lives. It emphasises the importance of individual adaptability and self-reflection, encouraging people to recognise their strengths, values, and goals, and to integrate these into the design of their personal and professional lives (Savickas et al., 2009). With self-construction at its core (Guichard, 2005), life design has initiated a new paradigm in the 21st century, blending two existing concepts from past career counselling studies: vocational guidance (Holland, 1959) and career development (Super, 1952). This new paradigm has shifted from matchmaking to meaning-making (Hartung, 2019) by focusing more on how work fits into life (Savickas, 2012) than on how people fit into work. Appropriate resources must be developed to nurture this attitude towards career planning among young people. Thereby, career adaptability resources (Savickas, 1997) are particularly crucial, as they prepare adolescents for the uncertainties presented by today's fluctuating work life (Vilhjálmssdóttir, 2015).

Career adaptability is typically conceptualised as a psychosocial state rather than as a stable trait based on a set of resources. The nature of these resources, known as the five Cs, becomes evident when young people are willing and able to autonomously plan, explore, decide, and cooperate to overcome challenges in their career planning (Nye et al., 2018; Savickas, 1997). Firstly, *concern* is essential for stimulating the necessary awareness and preparation in career planning, helping adolescents envision their future careers. *Control* encourages young people to recognise their capacity to make decisions and to take personal responsibility for their future choices. *Curiosity* fosters the exploration of oneself and the environment, leading to satisfactory career decision outcomes. *Confidence* is the belief in one's capacity to master challenges and solve problems; this ability is linked to overall self-efficacy (Savickas, 1997). The fifth resource, *cooperation*, introduced by Nye et al. (2018), conceptually differs from the other four psychological resources, as it primarily pertains to external relationships beyond the self.

The interplay between external and internal resources is crucial for young people's career planning. Career adaptability can be understood as the capacity to navigate internal resources, such as self-efficacy, and external resources, like social support – a core element of resilience as conceptualised by Ungar (2005). While the ability to negotiate access to resources also plays a role in Ungar's framework, we focus on self-efficacy and the active search for social support. These capacities can be seen as part of a dynamic process of resource management in response to career-related challenges. Schools can support this process by fostering career adaptability through targeted interventions; for example, teachers can help students feel more in control of their careers by highlighting aspects of career planning where adolescents can actively influence outcomes (Masdonati & Fournier, 2015). Furthermore, the gaming world offers a unique opportunity for young people to develop career adaptability resources, allowing them to experience decision-making, problem-solving, creative thinking, cooperation, and more in a simulated environment. Identifying and utilising these experiences from gaming can be particularly beneficial in enhancing their career adaptability resources.

The potential of video games for career planning

A key question to consider is why gaming should be regarded as an essential field for adolescents' career planning. Firstly, video games have become a viral leisure activity among young people in many parts of the world. For instance, in the United States, over 70% of individuals under 18 play video games regularly; in Switzerland, more than two-thirds of adolescents aged 12 to 15 are regular players (Entertainment Software Association, 2022; Külling et al., 2022). In

Norway, 76% of 9–18-year-olds participate in digital gaming activities (Kultur- og likestillingsdepartementet, 2024).

Secondly, it makes sense to take a closer look at the gender aspect in gaming, as the gaming world is still heavily shaped by persistent gender stereotypes. Current studies of media consumption indicate that there are still more male than female commercial video game players (Kinnunen et al., 2024; Külling et al., 2022; Kultur- og likestillingsdepartementet, 2024). Finnish male players predominantly engage in shooter (57%) and adventure games (46%), while female players prefer puzzle (56%) and simulation games (15%) (Kinnunen et al., 2024). Moreover, male players in Finland invest significantly more time and financial resources in gaming than females. The findings in Norway further highlight that female players encounter greater exposure to online harassment and social exclusion within gaming communities, underscoring persistent structural barriers to gender inclusivity in the digital gaming environment (Kultur- og likestillingsdepartementet, 2024).

Thirdly, many commercial video games address relevant societal issues and provide an opportunity to learn how to navigate real-world challenges (Lux & Budke, 2023). Consequently, the gaming world is of particular interest regarding how young people develop the skills necessary to adapt to a rapidly changing world of work.

Some efforts to involve the gaming world in young people's career planning already exist, such as serious games designed for learning rather than mere entertainment. In Switzerland, the game *like2be*¹ was created to promote diverse vocational exploration; in Germany, the feminine avatar in *Serena Supergreen*² serves as a role model for female adolescents pursuing careers in STEM (Keller et al., 2022, 2023; Spangenberger et al., 2022). In addition to serious games, game elements are currently utilised to enhance engagement and motivation by gamifying vocational orientation and vocational education classes (Fischer & Reichmuth, 2020; Jayalath & Esichaikul, 2020).

Resilience through game-based learning

'Playing video games regularly can be a healthy behaviour in helping people deal with stress and difficulties in real life' (Zhao et al., 2024, p. 4). Beyond their recreational and emotional benefits, video games also offer rich cognitive and social learning opportunities that can be meaningfully connected to educational and career development contexts. This perspective aligns with the concept of game-based learning, which conceptualises experiences, skills, and preferences developed in commercial video games as informal learning outcomes relevant to career planning (Prensky, 2003). Using the gaming world as a new reference for career interventions is already mentioned in the field of career transitions and coaching (Rochat & Armengol, 2020; Rochat & Borgen, 2021). The studies demon-

strate the significant potential for employing gaming as a tool for career planning by utilising a gaming-related metaphor to diminish the anxiety often associated with making major career decisions, thereby facilitating a more open-minded approach. In the current digital age, career counsellors and teachers should assist young adults in regulating their expectations and anxiety, which the overwhelming amount of information, uncertainty, and career options can increase (Sovet et al., 2018). By encouraging young people to view their career planning more playfully, as if it were a game, they can broaden their perspectives and turn the daunting task of career planning into a motivating challenge rather than an intimidating problem (Rochat & Borgen, 2021).

Recent research shows that gaming fosters confidence, adaptability, communication, collaboration, and problem-solving – skills that are essential for career adaptability (Barr, 2019b, 2019a; Savickas, 1997). Career adaptability is crucial not only for navigating the initial career choice process but also serves as a vital ability in a workforce characterised by constantly changing tasks, team structures, and emerging skill demands (World Economic Forum, 2023). Parola et al. (2024) systematically review digital games in career guidance, underscoring their role in enhancing career adaptability. The study highlights how digital games support career decision-making, increase engagement with career exploration, and nurture a more positive outlook on future professional opportunities. Furthermore, the findings suggest that game-based approaches provide an immersive and interactive environment that facilitates the development of key employability skills. Collectively, these studies demonstrate the increasing potential of video games as an innovative tool in career planning, offering interactive settings for developing adaptive skills. Moreover, structured reflection on gaming experiences can help young people enhance their employability and long-term career resilience (Barr, 2017; Zhao et al., 2024).

Commercial video games as informal learning environments

Playing video games is part of the youth subcultures and serves as an informal learning environment. The gaming world, with its rules, language, and cultural events, is viewed negatively by many adults, similar to many other youth subcultures (Fromme, 2003; Zeimet, 2011). Informal learning, more broadly, refers to the ongoing acquisition of knowledge, skills, attitudes, and insights through everyday experiences and interactions with one's environment. This type of learning takes place outside formal educational settings and naturally arises as a by-product of other activities (Johnson & Majewska, 2022).

Playing has, in general, enormous potential for the learning and meaningful development of young people (Gee, 2003; Huizinga, 1987; Piaget & Gattegno, 1972). This is evident in traditional games, such as sports or analog board and card games, as well as in many video games, defined in this article as screen-

based electronic games played on any hardware platform (Funk et al., 2003). While young people up to the age of 13 primarily engage with games from the realms of sports or traditional board and card games, the use of video games significantly increases after this age (Pronova BKK, 2023). Therefore, it is essential to consider adolescents' engagement with traditional board and card games along with sports games as well.

Indeed, in the realm of video gaming, this leisure activity is often still associated with challenges, such as increased aggression of gamers (Ferguson, 2018). While these factors deserve consideration, a solely deficit-focused view of adolescents' media activities overlooks numerous opportunities for connection (Preite, 2018). Several studies have shown that so-called transferable skills (Nägele & Stalder, 2017) can be developed and applied in commercial video games, enabling them to serve as valuable resources in real life (Adachi & Willoughby, 2013; Bediou et al., 2018; Qian & Clark, 2016). Moreover, video games frequently present challenges that require repeated attempts to progress to the next level, fostering self-efficacy and problem-solving abilities (Weerdmeester et al., 2022).

Furthermore, research has demonstrated that commercial video games can offer immersive informal learning opportunities by providing players with strong emotional experiences and positive feelings (McGonigal et al., 2012). Gaming environments can therefore provide a safe space for adolescents to confront and regulate negative emotions, such as frustration, and develop social skills beyond their student identity, such as teamwork and cooperation. This is particularly important because young gamers no longer play alone and isolated in front of their computers (Kenny & McDaniel, 2011; Kinnunen et al., 2024; Kultur- og likestillingsdepartementet, 2024; Zhang & Frederick, 2018) despite the many prejudices held by adults, parents, and educators. On the contrary, gamers are digitally connected through platforms like Steam, Discord, and Twitch, and studies show that playing games often enhances real-life relationships rather than simply replacing them (Schiano et al., 2014). More than 83% of gamers in the US engage with others in-person or online and 46% have met a good friend or significant other through video games (Entertainment Software Association, 2022). To sum up, most gamers develop a playful identity while playing, trying out different roles and new solutions, and sharing support with others to creatively and cooperatively overcome obstacles (McGonigal, 2016).

Skills developed through education, extracurricular activities, and leisure activities like gaming can enhance an individual's employability and adaptability in the changing labour market (Rochat & Bodoira, 2016). Therefore, a reflection on gaming skills can help young people to explore hidden resources for career planning that they were previously unaware of (Rochat & Armengol, 2020). This process can be regarded as an indirect investment in their internal resources

(Hobfoll et al., 2018) and may also influence other aspects of their resources. For instance, skilled players in video games can effectively utilise in-game resources, such as the social support acquired through collaboration with other players (McCreery et al., 2011).

Reflecting on gaming experiences and the skills involved can enhance the transfer of valuable learning into career planning. Recent research has increasingly examined how skills gained through commercial video games contribute to career development. Wallinheimo et al. (2023) found that different professional fields tend to favour specific game genres, which help cultivate transferable soft skills such as problem-solving, spatial awareness, and leadership. Similarly, Kraus et al. (2021) identified a correlation between frequent gaming and improved cognitive abilities, including opportunity recognition – an essential skill in entrepreneurship. It can, therefore, be assumed that if young people use and even develop career-related skills through gaming, reflecting on their gaming experiences can indirectly contribute to their career planning by uncovering these competencies.

Hypotheses and conceptual model

The following hypotheses emerged from analysing the theory and are represented in the conceptual model (see Figure 1).

Influence of gender on game type, search for social support, and self-efficacy

Current studies on media consumption indicate that there are still more male than female commercial video game players (Külling et al., 2022). Furthermore, research suggests that female students tend to utilise and benefit more from higher levels of social support. In contrast, male students tend to demonstrate higher self-efficacy, believing more in their ability to successfully use their skills to achieve goals and overcome challenges in career planning (Hirschi, 2009; Rueger et al., 2008).

Therefore, we have the following three hypotheses regarding the influence of gender:

H 1.1 Being a male student has a positive effect on the game type (video games).

H 1.2 Being a female student has a positive effect on the search for social support.

H 1.3 Being a male student has a positive effect on self-efficacy.

Influence of self-efficacy, search for social support, and game type on career adaptability

Video games often reflect real-world scenarios (Lux & Budke, 2023). Consequently, we posit that skills utilised in video games can be mapped to the career

adaptability framework (Nye et al., 2018; Savickas, 1997). This framework of the 5Cs encompasses both, navigating internal resources, which can be translated to the concept of self-efficacy (Schwarzer & Warner, 2013), and external resources, which can be interpreted as search for social support (Schulz & Schwarzer, 2003). In the context of career planning, we hypothesise, therefore, that the coding of career adaptability resources represented by gaming skills will correspond to the navigation of internal and external resources in the process of career planning in the real world. Therefore, we propose the following hypothesis:

H 2.1 The game type (video games) positively influences the frequency of career adaptability resources in gaming.

H 2.2 The perceived search for social support in career planning influences the frequency of career adaptability resources in gaming.

H 2.3 The perceived self-efficacy of adolescents in career planning positively influences the frequency of career adaptability resources in gaming.

Influence of career adaptability on learning transfer

Since gaming skills are considered as transferable (Kailani et al., 2019; McCreery et al., 2011), they may be more easily applied to career planning. Therefore, we assume that if young people exhibit more gaming skills that align with the career adaptability framework (Nye et al., 2018; Savickas, 1997), they will also perceive these skills as advantageous for their career planning. Thus, we hypothesise:

H 3 The frequency of career adaptability resources in gaming has a positive effect on the transfer of learning to career planning.

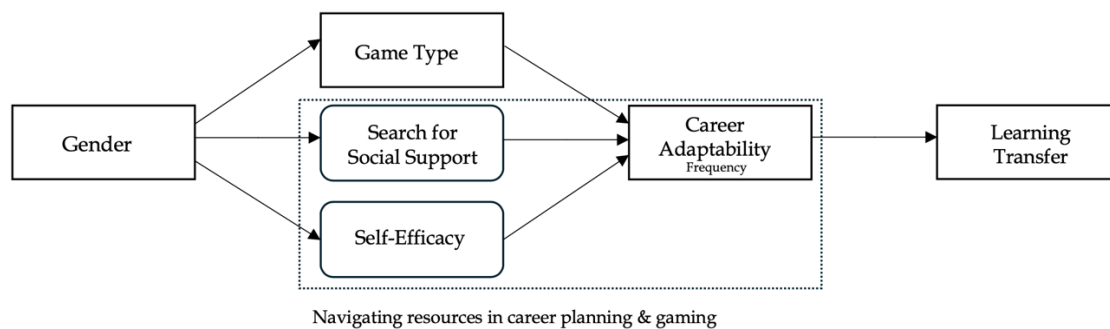


Figure 1. Conceptual model.

Methods

The following methodological approaches were employed to address the hypotheses concerning the classification of game skills as career adaptability resources and their impact on learning transfer to career planning, as well as the alignment of external and internal resource navigation between real life and gaming.

Participants and procedure

The data for this article stem from the earlier part of the longitudinal study (2021–2025) digibe³ (Nägele et al., 2025) conducted by the School of Education, University of Applied Sciences and Arts Northwestern Switzerland (FHNW), on the digital support of young people in career orientation at the lower secondary level (Grades 9–11) in Switzerland. The study is carried out in collaboration with the Bern University of Teacher Education and the School of Applied Psychology, University of Applied Sciences and Arts Northwestern Switzerland (FHNW). The selected sample comprises 265 students who completed the reflection task ‘Skills in Games, Skills in Career Planning’ as part of a module inviting students to apply a video game metaphor in their career planning (Hoffelner et al., 2025; Nägele et al., 2025). The students worked on the tasks between September 2021 and June 2023. The 52 participating schools were located in five of the seven Swiss major regions. Almost half of the schools came from Northwestern Switzerland (46%; Aargau, Basel-Landschaft, Solothurn), while 22% were located in Central Switzerland (Lucerne, Schwyz, Zug, Nidwalden) and 17% in the Espace Mittelland (Bern). Eastern Switzerland accounted for 14% of the sample (Schaffhausen, St. Gallen, Glarus, Graubünden), and 2% of the schools were located in the Zurich region (Zurich). No schools were included from the Lake Geneva Region or Ticino. This distribution ensured a broad representation of both urban and rural areas within the German-speaking part of Switzerland. The majority of students (71%) lived in urban areas, with smaller proportions from intermediate (15%) and rural (14%) regions (Swiss Federal Statistic Office, 2025).

All parents were fully informed and provided active, informed consent for their children to participate in the study. The participating teachers were involved in career education, and they received comprehensive information about the scientific basis of the project and its aims, including the use of data throughout the study and its anonymised processing, which they communicated to both students and parents. The students’ parental backgrounds were fairly evenly distributed across lower (41%), middle (29%), and higher (30%) occupational levels (ILOSTAT, 2025), with software developers, office clerks, and educators being the most common roles.

Students were free to choose between working on the reflection tasks or engaging in alternative work unrelated to the project. The following three

questions were embedded in the reflection task 'Skills in games, skills in career planning', enabling students to reflect on their gaming habits and preferences and consider their relevance to career planning (Hoffelner et al., 2025; Nägele et al., 2021). First, students had to freely name the game they played most often. Second, they were asked an open-ended question about the skills required in that game. Third, they were invited to reflect on whether they could apply these skills to their career planning.

The software utilised to code the data was MAXQDA (VERBI, 2023). In this software, coding involves selecting text segments and assigning them to relevant codes to systematically organise and analyse qualitative data. The open questions were generally coded based on qualitative content analysis (Früh, 2015; Mayring, 2016). For this study, the responses regarding favourite games and the usefulness of gaming skills for career planning were inductively coded, allowing the category system to emerge from the data. The gaming skills were deductively coded based on the career adaptability skills framework (Savickas, 1997), ensuring alignment with the established theoretical framework. A second coder independently coded a sample of response texts, and the reliability measure of Cohen's Kappa (Landis & Koch, 1977) was calculated to evaluate the quality of coding.

For this study, measures on seeking social support and self-efficacy (Schulz & Schwarzer, 2003; Schwarzer & Jerusalem, 1997; TREE, 2016) were used to assess external and internal resources. These measures, along with the information on gender, were taken from the status questionnaire (Nägele et al., 2021) administered at the beginning of the project, where students reported on current state of their career planning. Students filled in the questionnaire during career orientation classes. The duration between completing the reflection task and responding to the status questionnaire varied for each individual. A test was conducted to determine if this time difference influenced the results; the outcomes indicated that it did not.

Finally, the coding results, represented by one code per response, were matched directly to the survey data and other variables. The combined dataset was then analysed to draw conclusions from the coded information for further analyses by using chi-square and structural equation models (SEM) with the statistical software MPLUS (Muthén & Muthén, 2021) and JASP (2023).

Measures

Gender and game type

Gender was assessed using a single standardised item that provided students with three options: 'female', 'male', and 'diverse'. In Germany, the category

‘diverse’ has been legally recognised since 2018 and is increasingly used as an umbrella term in surveys and official documentation for people who do not identify with binary gender categories (Hadler, 2022). In the German-speaking part of Switzerland, the category ‘diverse’ does not yet exist legally but remains under discussion. For research purposes, we have adopted Germany’s approach, which is also reflected in public discourse and by LGBTQ+ organisations such as the Transgender Network Switzerland (TGNS). In the sample of this study ($N = 265$), 57% were male students ($N = 151$), while 43% were female students ($N = 114$). No students selected ‘diverse’.

The game type that students played was derived from the open-ended question about their favourite games, which was coded into two categories: video gamers ($N = 147$) and non-video gamers ($N = 118$).

Since the students did not always identify a single game as their most played, we combined those who selected only video games with those who mentioned video games alongside other types in the category of video gamers. Those who did not specify any particular games or referenced non-video games, such as sports or traditional card and board games, were categorised as non-video gamers. Video gamers reported playing video games exclusively (e.g., Grand Theft Auto V, Minecraft, Clash Royale), or in combination with sports (e.g., I really enjoy playing soccer in real life, but I also like playing FIFA; Occasionally, I also play GTA or Shadow Fight), or alongside traditional card or board games (e.g., Chess, Ludo, Minecraft, Assassin’s Creed). Non-video gamers stated none or only sports (e.g., Tennis), only traditional board or card games (e.g., City, Country, River), or a combination of both (e.g., Chess, Soccer, Exit, Monopoly). Two raters independently coded 40% of the responses, and the interrater reliability was very good, with a Cohen’s Kappa of 0.99.

Navigating resources in career planning: Search for social support and self-efficacy

Search for social support was measured with three items based on Schulz and Schwarzer (2003), for example, ‘If I don’t know what to do, I ask others what they would do in my place’, on a scale from 1 ‘does not apply at all’ to 5 ‘applies very much,’ ($N = 265$, $M = 3.61$, $SD = .82$, *Cronbach’s* $\alpha = .76$).

Self-efficacy was measured with three items taken from the longitudinal study TREE (2016), based on Schwarzer and Jerusalem (1997), for example, ‘When a problem arises, I can solve it on my own.’, on a scale from 1, ‘does not apply at all’ to 5, ‘applies very much,’ ($N = 265$, $M = 3.44$, $SD = .73$, *Cronbach’s* $\alpha = .72$).

Navigating resources in gaming: Career adaptability

Students were invited to respond to an open-ended question: ‘Identify and describe five skills that you apply when playing your favourite game.’ To code

the five responses, we chose to use the career adaptability approach with its 5Cs for coding, namely concern (e.g., motivation), curiosity (e.g., being attentive), control (e.g., making decisions), confidence (e.g., persistence) and cooperation (e.g., playing in a team). Each category was labeled and numbered, along with a definition, examples, and coding guidelines for clarity. The coding procedure underwent revisions until a satisfactory level of agreement was reached. The number of career adaptability resources indicated is presented as 'Career Adaptability Frequency' and ranges from 0 to 5. Two raters coded 40% of the responses independently, with interrater reliability being very good by Cohen's Kappa of 0.88.

Learning transfer

The open-ended question, 'Can you also use the gaming skills you mentioned for career planning?', was employed to explore the extent to which students demonstrated a learning transfer to career planning in their responses. The answers were coded into two categories: Yes (e.g., I think yes, because one should always remain calm and kind, be a team player, and often think things through carefully.) and No (e.g., I don't think so.). Two raters independently coded 40% of the open-ended responses using MAXQDA (VERBI, 2023). They achieved high interrater reliability, with Cohen's Kappa at 0.96.

Strategy of analysis

We employed SEM with MPlus (Muthén & Muthén, 2021) to analyse the data. SEM is a preferred method for examining path models with latent constructs in the field of social sciences (Civelek, 2018). To evaluate model fit, we considered the comparative fit index (CFI), Tucker-Lewis index (TLI), and root mean square error of approximation (RMSEA) (Hu & Bentler, 1998). CFI and TLI values above 0.90 and RMSEA values below 0.08 indicate acceptable fit, while values above 0.95 and below 0.06 represent good fit (Hu & Bentler, 1998). We used bootstrapping, a statistical resampling method, to estimate parameters from the sample (Preacher & Hayes, 2008). Latent-variable structural path analyses were conducted using maximum likelihood estimation (Maydeu-Olivares, 2017).

Results

Descriptive statistics

Table 1 presents the means, standard deviations, and intercorrelations of the study variables. Gender (male) shows a positive correlation with the game type (video game) and a negative correlation with the frequency of career adaptability resources. The search for social support is positively correlated with self-efficacy.

Additionally, the game type (video gamer) is positively correlated with both the frequency of career adaptability resources and positive learning transfer, while the frequency of career adaptability resources correlates positively with positive learning transfer. High correlations (i.e., $>.60$) were examined, and none were found, suggesting that multicollinearity is unlikely to bias our results (Tabachnick & Fidell, 2013).

Table 1. Descriptive statistics and correlations among variables.

	M	SD	1	2	3	4	5
1 Gender	.57	.50					
2 SSO	3.62	.82	-.09				
3 Self-Efficacy	3.44	.73	.11	.15*			
4 Game Type	.56	.50	.27***	-.06	-.02		
5 CA Frequency	2	1.66	-.02***	.09	-.02	.20**	
6 Learning Transfer	.45	.50	-.05	-.02	-.02	.15*	.48***

Note. N = 265; SSO = Search for Social Support; CA = Career Adaptability; Gender dummy coded 1 = male, reference = female, Game Type dummy coded 1 = video gamer, reference = non video gamer, Learning Transfer dummy coded 1 = yes, reference = no learning transfer, * $p < .05$, ** $p < .01$, *** $p < .001$.

Gender and game type

Female students, $\chi^2(6) = 44.23$, $p < .001$, report a greater variety of favourite games in traditional board and card games (*adj. res* = 4.74), sports (*adj. res* = 2.04), or a combination of both (*adj. res* = 2.22). In contrast, male students primarily reference video games (*adj. res* = 4.27) or a mix of video games and sports (*adj. res* = 2.79).

Career adaptability resources

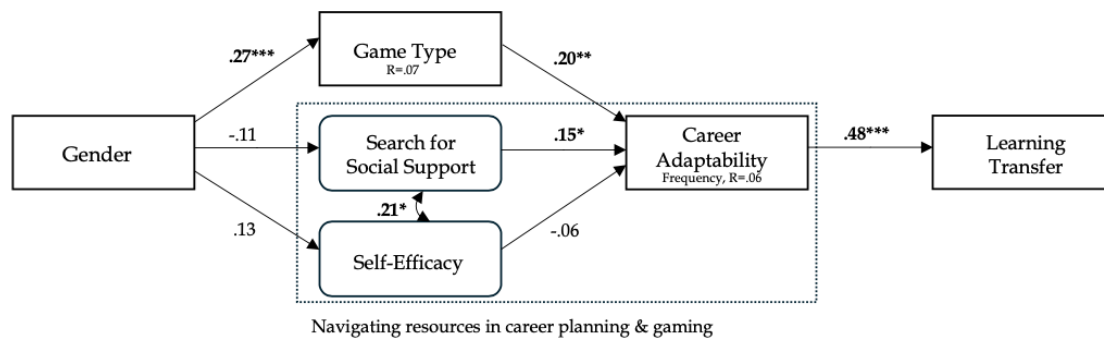
We examined the students' responses regarding which skills they use during a game. Out of the 265 participants, 77% ($N = 204$) identified one to five skills they employed in the games (e.g., planning, team play, programming); 23% ($N=61$) gave responses that we categorised as indicating no skills (e.g., luck, money, nothing). Overall, most students mentioned several skills, typically four or five, while only a few cited between one and three skills.

Out of the sample ($N = 265$), we found that 71% ($N = 187$) reported 529 skills, which can be categorised using the career adaptability approach (e.g., perseverance, logical thinking, decision-making). Additionally, 29% ($N = 78$) identified 198 other skills (e.g., feeling for the ball, farming, good reflexes). Among the students, 59% ($N = 156$) mentioned two or more career adaptability resources

while gaming, while 12% ($N = 31$) reported at least one. Of the students who listed career adaptability resources ($N = 187$), 20% ($N = 37$) fell into the concern category (e.g., good tactic, always thinking one step ahead, concentration), 65% ($N = 122$) into the control category (e.g., good considerations, finding fast solutions, logical thinking), 34% ($N = 63$) into the curiosity category (e.g., being attentive, creativity, roleplay), 34% ($N = 64$) into the confidence category (e.g., patience, not giving up, being ambitious) and 49% ($N=91$) into the cooperation category (e.g., teamwork, being able to talk well, being fair with others).

Hypothesis testing

The model presented in Figure 2 demonstrates a good fit, $\chi^2(31, N = 265) = 45$, $p = .05$, $CFI = .97$, $RMSEA = .04$, $SRMR = .05$, $TLI = .96$ (Cohen, 1988).



Note. $N = 265$; Gender dummy coded 1 = male, reference = female, Game Type dummy coded 1 = video gamer, reference = non video gamer, Learning Transfer dummy coded 1 = yes, reference = no learning transfer, * $p < .05$, ** $p < .01$, *** $p < .001$.

Figure 2. Path model.

As anticipated, being male is associated with playing video games. The unstandardised path weight from gender to game type was $b = .27$, $p < .001$, confirming Hypothesis 1.1.a. We hypothesised that being female positively influences the search for social support, but our research shows that the female gender does not positively impact navigating social resources, $b = -.11$, $p = .11$, indicating Hypothesis 1.2a is not confirmed. Our assumption that being male affects self-efficacy in adolescent career planning has not been supported, $b = 0.12$, $p = .12$, leading to the conclusion that Hypothesis 1.2b is also not confirmed.

We hypothesised that the number of career adaptability resources is influenced by the game type (video game), the search for social support, and self-efficacy. We found a significant positive effect of the game type (video game) on the frequency of the career adaptability resources mentioned, $b = .20$, $p < .001$. Hypothesis 2.1 is confirmed. Additionally, we observed a positive effect of

seeking social support on the number of career adaptability resources, $b = .14$, $p < .05$, confirming Hypothesis 2.2. However, there was no effect of self-efficacy on the frequency of the career adaptability resources, $b = -.05$, $p = .12$, leading to the conclusion that Hypothesis 2.3 is not confirmed.

We hypothesised that the learning transfer depends on the number of career adaptability resources mentioned. As expected, we found that naming a high number of career adaptability resources positively affects learning transfer, $b = .48$, $p < .01$. Thus, Hypothesis 3 is confirmed.

Discussion

First, participants were asked about their favourite games and the skills they developed through gaming. The analysis of game preferences revealed a wide variety of games, including video games, sports, and traditional board or card games. Most adolescents listed between one and five skills cultivated through gaming, such as planning, teamwork, and decision-making. Young people can, therefore, identify the skills they use and develop in video games, even without predefined response options. The only instruction needed is to encourage adolescents to consider and reflect upon the skills they develop through gaming. This could be approached similarly to career counseling sessions, where the game metaphor is utilised (Rochat & Armengol, 2020).

This data was analysed with a focus on gender differences, aiming to understand how male and female students might exhibit different results in their favourite games and their behaviour in navigating career planning resources. In this study, the gender variable was recorded in a binary format, indicating a lack of diverse responses. This limited variation may be influenced by the context of career planning, which remains strongly shaped by prevailing gender stereotypes (Hupka-Brunner & Meyer, 2023). Such stereotypes can lead students to align themselves with binary categories, potentially adjusting their responses to fit perceived expectations rather than fully expressing their own gender identity. An interesting finding was the gender association between preferred types of games, with male students tending towards video and sports games, while female students preferred traditional board or card games. This observation aligns with research trends, indicating distinct gaming behaviours among genders (Külling et al., 2022; Mäyrä et al., 2024; Kultur- og likestillingsdepartementet, 2024).

When interpreting the results, it is essential to consider that video gaming remains a male-dominated domain, often leading to the underrepresentation of women and other marginalised groups (Richard & Gray, 2018). Consequently, this environment can influence gaming behaviours and the self-perception of female gamers. Socialisation processes, for instance, typically encourage boys to

engage with digital and competitive games, whereas girls are more often guided towards social or non-digital forms of play, reflecting the influence of prevailing cultural and gender norms (Kelly et al., 2023). Additionally, stereotype threat may further inhibit female participation, as societal narratives frequently question their gaming competence (Ratan et al., 2015). Moreover, self-reporting biases and social framing play a role in shaping game preferences. Specifically, female gamers often underreport their gaming activity, particularly in casual genres such as mobile and puzzle games, which are perceived as less skill-intensive and thus excluded from the 'hardcore gamer' identity (Eklund, 2015; Yao & Rhodes, 2023). As a result, these perceptions reinforce the notion of gaming as a predominantly male domain, discouraging women from identifying as gamers and exacerbating gender disparities. These factors may have influenced the findings of this study, wherein male students more frequently reported a preference for video games. Cultural framing and self-perception biases likely contribute to male students' greater willingness to identify as gamers, while female students may underreport their gaming engagement due to prevailing stereotypes.

Interestingly, in the context of career planning, a different gender pattern emerges. Being female does not influence the utilisation of social resources in career planning, contrasting with the findings of other studies (Rueger et al., 2008). Furthermore, no impact of gender on self-efficacy in career planning could be identified, which aligns with the varied results in research showing that, in general, the effect of gender on self-efficacy in career planning is complex and influenced by additional factors, including social and cultural background (Booth et al., 2022; Sagone et al., 2020).

As career adaptability resources are essential for navigating today's uncertainties in the job market, the coding was done based on the career adaptability framework outlined in this paper (Nye et al., 2018; Savickas, 1997). This included resources for planning (concern), decision-making (control), exploration (curiosity), problem-solving (confidence) and teamwork (cooperation). The data was then analysed using a structural equation model, demonstrating a robust fit that confirms the reliability of our findings.

The study found that the identified gaming skills correlate with career adaptability resources. It determined that adolescents who play video games tend to report a greater number of career adaptability resources. This challenges the traditional opposing viewpoint that underestimates the educational value of video games (e.g., Ferguson, 2018). This finding supports the idea that video gaming, along with its often-utilised real-life scenario, serves as a valuable informal learning environment for developing essential resources in today's digital and fast-evolving world (Rochat & Armengol, 2020; Rochat & Borgen, 2021).

Our study also sheds light on the roles of navigating to internal and external resources in real life and their impact on referencing career adaptability resources in gaming scenarios. While self-efficacy and related problem-solving skills are not evident in gaming, the use of external, primarily social resources is reflected in the mention of more career adaptability resources. Therefore, young people who actively seek the opinions and support of various individuals when planning their careers have greater access to gaming resources. One could argue that seeking social resources enables young people to leverage diverse resources for problem-solving.

The connection between identifying career adaptability resources and a positive learning transfer to career planning was also confirmed. Learning transfer is positively influenced by recognising a greater number of gaming skills that can be classified as career adaptability resources. This underscores the importance of encouraging young people to link their leisure activities, such as gaming, to their career planning. By willingly applying their gaming habits to strategies in their career planning process, they may discover hidden resources that can be beneficial.

Results from the SEM also indicate that gender influences the type of games played, which in turn affects the frequency of identified career adaptability resources and ultimately the learning transfer. Specifically, male students are more likely to engage in certain game types, particularly video games, that help them identify more gaming skills applicable to career adaptability resources. For male students, engaging in one of their preferred leisure activities, gaming, can thus be an effective way to reflect on their behaviour within gaming contexts and recognise potential resources for navigating career decision-making processes.

Conclusion

Overall, the study found that adolescents can identify and articulate skills gained through gaming, aligning with the career adaptability resources framework, which includes concern, control, curiosity, confidence, and cooperation (Nye et al., 2018; Savickas, 1997). Career adaptability is crucial for resilience, enabling individuals to manage challenges and transitions more effectively (Santilli et al., 2020). In a rapidly evolving job market, adaptability and resilience rank among the top skills required for employability, as highlighted by the World Economic Forum (2023). By cultivating these skills, students can establish a stronger foundation for informed career planning and for managing the demands of contemporary education and work environments. This study highlights the potential of video games as an informal learning tool to raise awareness of resources like career adaptability and resilience in adolescents. These insights can

be highly beneficial for career planning and may help to reduce dropout risks in vocational education and training (VET).

The implications of these findings are particularly relevant for the Nordic countries and Switzerland, where reducing dropout rates in VET programmes remains a common challenge. Dropout rates tend to be higher in VET pathways than in general education. In Switzerland, approximately 25% of apprenticeships are terminated within the first year (Bundesamt für Statistik, 2023), while, for example, in Norway, around 30% of VET students do not complete their programmes (Schmid, 2017). Given these challenges, integrating game-based learning into the VET curriculum – or even earlier at the lower secondary level – could help foster essential skills, such as career adaptability, which may be critical for vocational pathways and reducing dropout risk.

In particular, young men – who are disproportionately affected by VET dropout rates in both Switzerland and the Nordic countries – may benefit from targeted game-based interventions. While male students report lower levels of social help-seeking in the context of career planning, this behaviour is associated with identifying fewer career adaptability resources in gaming. Interestingly, the same group demonstrates high engagement with video games, where they frequently practise career adaptability competencies such as problem-solving, decision-making under pressure, and strategic collaboration. This contrast highlights a promising opportunity: video games can serve as an accessible and relatable ‘door opener’ to initiate career-related reflection and resource awareness. Career counsellors and educators can draw on the familiarity and motivational appeal of gaming to introduce concepts of support-seeking and teamwork in a context that resonates with young male students (Ginevra et al., 2015).

Moreover, using game-based metaphors can help normalising the idea of drawing on others’ strengths and perspectives when facing complex decisions. As shown by Rochat and Borgen (2021), such metaphors support young people in recognising overlooked resources and translating them into their real-life planning processes. Just as every game hero relies on a guild with complementary abilities to overcome complex challenges, adolescents can be encouraged to build their own ‘career team’ – comprising peers, teachers, counsellors, or family members – to support their career planning. By bridging the gap between informal learning experiences in gaming and formal career guidance, practitioners can more effectively engage male adolescents who might otherwise be hesitant to seek support. At the same time, fostering reflective practices through game-based approaches holds broader potential: encouraging early engagement with reflective practices benefits all students, regardless of gender. Early reflection enhances self-awareness and facilitates a smoother transition into more structured learning environments such as VET. Dahlberg and Gustavsson (2024) noted that reflective practices and digital simulations are increasingly crucial in

Nordic VET systems, which are predominantly school-based and often lack experiential learning opportunities. Introducing structured game-based learning and reflection into lower secondary education can bridge this gap, preparing students for the demands of self-directed learning and digital simulations in modern VET programmes.

In summary, the reluctance to embrace game-based learning risks overlooking a highly relevant and motivating context in which adolescents are already developing essential skills for career planning. Additionally, using the metaphor of a video game in guidance settings can serve as a powerful motivational tool. Educators and career counsellors should recognise the informal learning potential of video games and actively guide adolescents in reflecting on their gaming experiences. This encourages them to apply familiar gaming competencies to their own career-planning journeys, helping them access hidden resources. By making these resources visible and transferable through structured reflection, professionals can better prepare young people to navigate resources for the uncertainties of modern work and education more consciously.

Limitations and outlook

The study didn't consider video game genres significantly influencing skill acquisition. Presenting the effects in a more nuanced way when considering game type would be beneficial. Additionally, reliance on self-reported data obscures clarity regarding skill development during gaming and its transfer to career planning. Further research is required to investigate these processes, potentially using qualitative methods and more extended observation periods. Another limitation of this study is its binary classification of gender, which fails to encompass the full spectrum of gender identities. Future research should explore how gaming experiences and career-related effects extend beyond the binary, facilitating a more inclusive understanding of young people's gaming habits and resources.

Endnotes

¹ See webpage, www.liketobe.ch

² See webpage, <https://serena.thegoodevil.com/>

³ See webpage, www.digibe.ch

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Ethical considerations

The study received approval from the ethics commissions of the collaborating universities, ensuring that all procedures adhered to ethical standards for research involving human subjects. Regular reports are submitted to the State Secretariat for Education, Research and Innovation (SERI) of Switzerland as required. Participation is based on obtaining fully informed consent from students, their parents, and teachers. In line with our open data policy, the collected data will be made publicly available upon the project's completion.

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Transspråking på yrkesfag: En nøkkel til elevens kompetanse

Translanguaging in vocational programmes:
A key to the student's competence

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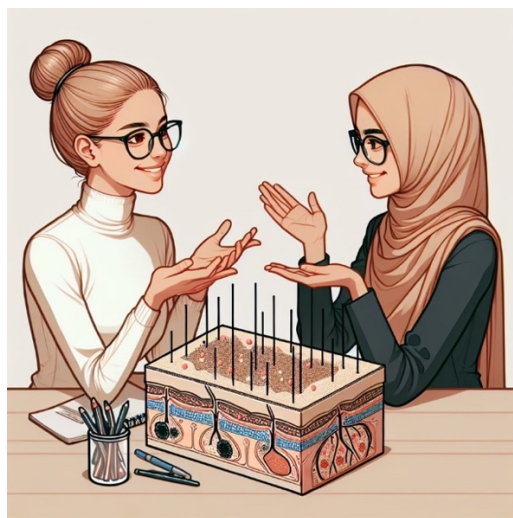
Abstract

This article presents a case study of translanguaging in the vocational programme in skin therapy at a Norwegian upper secondary school. The term translanguaging is used to describe a communicative practice and pedagogical approach that enables students to utilise a diverse range of linguistic and semiotic resources to comprehend and communicate themselves. This is deemed particularly suitable for recently arrived minority language learners who are still in the process of developing their verbal skills in the language of instruction. Based on observations and recordings of assessment dialogues, where students used a self-designed model to communicate their competencies, we show how the use of this model, alongside students' and teachers' use of gestures, as well as students' use of several languages, together strengthens students' potential for communicating, meaning making and learning. The model, the gestures and the use of multiple languages serve to structure and support the students' communication, memory and language, and have an important interactional function. As such, they provide cognitive, communicative and interactional scaffolding. Based on these findings, we discuss the particular need and potential for translanguaging in vocational education programmes.

Keywords: vocational education and training, translanguaging, newly arrived students, use of models, gestures, multilingualism



Innledning



Figur 1. KI-generert illustrasjon av eleven Jamila og læreren Anna i samtale.

"Da vi starter på sansecellelaget, som vi ser her. Her har vi keratinocytter, her har vi merkelceller." Jamila, en nyankommen minoritetsspråklig elev på hudterapi, peker på en modell av hudens oppbygging (figur 1) som hun og en medelev, Selda, har lagd i forbindelse med et prosjekt om hudens oppbygging, funksjon og helse. Nå deltar hun i en vurderingssamtale med læreren, Anna, der de begge bruker modellen aktivt (figur 2). De ser og peker på den mens de samtaler, de snur på den for å finne det de vil vise og snakke om, den er ofte utgangspunkt for Annas spørsmål, og Jamila støtter seg på den når hun skal beskrive og forklare fagbegrep og prosesser i huden.



Figur 2. Jamila og Seldas hudmodell.

Denne og lignende observasjoner er utgangspunkt for denne artikkelen, hvor vi belyser hvordan tre nyankomne elever, Jamila, Selda og Rojin (alle navn er fiktive), med halvannet til tre års botid i Norge, og læreren deres, Anna, *transspråker*, det vil si trekker veksler på et bredt sett av språklige og semiotiske ressurser for å uttrykke seg og forstå (Williams, 2022). Observasjonene er henta fra forsknings- og utviklingsprosjektet *(Andre)språk på yrkesfag*, som undersøker språkpraksiser, språkkrav og språkopplæring for nyankomne elever på yrkesfag.

En stadig økende andel elever i yrkesfaglige utdanningsprogram i videregående skole er nyankomne, det vil si at de har kommet til Norge når de aldersmessig hører til på ungdomstrinnet eller i videregående opplæring (Andreassen, 2024). Disse elevene er særlig sårbare i utdanningssystemet, både i Norge (Hauge et al., 2024) og internasjonalt (Brännström, 2021), og en snakker gjerne om en "late arrival penalty" (Valenzuela, 1999). De har svakere skoleresultat, rapporterer om mindre trivsel og fullfører i mindre grad enn sine norskfødte jevnaldrende (Hauge et al., 2024). Kun 51,7 prosent av dem fullfører videregående opplæring på normert tid, mot 71,9 prosent av elevgruppa som helhet (SSB, 2024). En av årsakene til utfordringene er den svært krevende læringsoppgaven disse elevene står overfor: De skal både tilegne seg gode norskferdigheter og avansert faglig kompetanse på kort tid. Elever på yrkesfag skal dessuten tilegne seg profesjonell kommunikativ kompetanse (Fillettaz, 2022). Etter kun to år på skole skal de fleste ut i læretid i bedrift. Her skal de praktisere yrket de utdanner seg til, og (videre)utvikle de kommunikative ferdighetene som kreves i yrket.

Nyankomne elever på yrkesfag er derfor avhengige av god og effektiv språk- og fagopplæring. Ei anbefalt tilnærming i opplæring for denne elevgruppa er å legge til rette for *pedagogisk transspråking*, det vil si systematisk og målretta bruk av et bredt sett av språklige og kommunikative ressurser i læringsarbeidet (García & Wei, 2019). Ei rekke forskere peker på at slik transspråking gir elevene betydelig bedre muligheter til å lære både språk og fag (f.eks. Beiler, 2020; Dewilde & Beiler, 2021; García & Wei, 2019; Williams, 2022). Yrkesfagopplæring gir rikelig mulighet for bruk av flere modaliteter i og med at mye av opplæringa er praktisk, kroppslig og muntlig (Andersen, 2024b; Hyland, 2018). Det er dermed et stort potensial for transspråkingspedagogikk nettopp i denne opplæringskonteksten. Samtidig er det få studier som retter oppmerksomhet mot transspråking på yrkesfag (Mustonen & Strømmer, 2022), og flere studier viser at yrkesfaglærere har relativt liten bevissthet om språklige og kommunikative sider ved opplæringa (Andersen, 2024a; Paul, 2023; Wildeman et al., 2021).

Denne studien har som mål å bidra med mer kunnskap om transspråking på yrkesfag, samt belyse hvordan transspråking kan styrke elevenes muligheter for kommunikasjon, meningsskaping og læring. Mer konkret belyser vi følgende problemstilling: *Hva kjennetegner elevers og læreres transspråking i vurderings-*

samtaler, der elevene støtter seg på en sjøllagd modell, og hvordan bidrar transspråkinga til at elevene får uttrykt seg, skapt mening og vist kompetanse?

Transspråking i teori og forskning

De siste tiåra har transspråking som begrep og perspektiv på språkbruk og språkopplæring vunnet terreng i norsk og internasjonal språk- og utdanningsforskning (Canagarajah, 2018a, 2018b; Dewilde, 2016, 2019; Dewilde & Beiler, 2021; García & Otheguy, 2020; Wedin, 2022; Hua et al., 2020). Transspråking beskriver for det første en språkpraksis der språkbrukere overskrider (transcenderer) grensene mellom navngitte språk, som for eksempel norsk og arabisk (García & Otheguy, 2020). For det andre viser det til en overskridelse av grensene mellom verbal og nonverbal kommunikasjon, jf. Zhu og kolleger (2020, s. 66–67) som sier at transspråking må forstås som bruk av ressurser fra et *kroppsliggjort repertoar* (eng. "embodied repertoire"), der blant annet stemme, kroppsspråk og bevegelse, samt mediering av objekter, teknologi og språk virker sammen i kommunikasjon. Transspråking innebærer altså et utvida syn på språk og kommunikasjon, som bryter med tradisjonelle forståelser av kommunikasjon som *enspråklig* og *verbalspråklig* (Lau, 2020). Språkvitenskapen, skolen og samfunnet er ofte kritisert for å ha en *lingvistisk skeivhet* (eng. "lingual bias") (Block, 2014), som vil si at det verbalspråklige blir vektlagt på bekostning av det nonverbale (Lau, 2020). Transspråking innebærer et oppgjør med denne skeivheten, ved å anerkjenne at all kommunikasjon *alltid* innebærer bruk av flere semiotiske ressurser (Canagarajah, 2018b). Det er en slik brei forståelse av transspråking vi legger til grunn i denne studien.

Transspråking brukes både beskrivende og foreskrivende – både som en beskrivelse av folks sjølinitierte og uformelle bruk av flere kommunikative ressurser, og som ei foreskriving av bestemte pedagogiske tilnærminger, der det overordna prinsippet er at all opplæring bør anerkjenne og bygge på elevenes samla og sammensatte språklige og kommunikative repertoar (García & Wei, 2019). Den første formen for transspråking omtales gjerne som *spontan* transspråking, mens den andre ofte kalles *pedagogisk* transspråking. Idealet er at en bygger videre på elevenes spontane transspråking, gjennom aktivt og målretta å legge til rette for at elevene kan ta i bruk flere språk og modaliteter – herunder sine kropp og gester – i språk- og fagopplæring. Dette er hensiktsmessig, både faglig og sosialt. Det gir alle elever større mulighet for å forstå, delta, mestre og lære, og det gir elever som er i ferd med å lære opplæringspråket, flere og mer aldersadekvate kognitive, kreative og kritiske utfordringer (García & Wei, 2019).

Mye forskning bekrefter og utvider de transspråkingsteoretiske perspektiva beskrevet over. I en norsk kontekst har blant annet Dewilde (2016, 2017) under-

søkt nyankomne ungdommers transspråklige skrivepraksiser. Hun fant at transspråking bidro til elevenes skriveutvikling – også på norsk, og at det virka myndiggjørende (Dewilde, 2016). Også Dewilde og Beiler (2021) beskriver det store potensialet som ligger i transspråkingspedagogiske tilnærminger i en undersøkelse i grunnskole for voksne. De beskriver blant annet hvordan elever med lite eller ingen skolegang tjener på å bruke egne språkferdigheter og kunnskap i læringsarbeidet. Så vidt oss bekjent, er det få studier om transspråking på yrkesfag. Mustonen og Strømmer (2022) har imidlertid undersøkt to elevers transspråking på helsefagarbeiderutdanninga i Finland og finner at bruken av flere språk i opplæringa bidro til at elevene fikk en dypere forståelse av det spesifikt helsefaglige innholdet. I tillegg understreker de betydninga av at elevene fikk styrka sin flerspråklige kompetanse, noe som både har en egenverdi og er en ressurs i yrkeslivet.

Felles for studiene beskrevet så langt, er at de i all hovedsak undersøker elevers bruk av flere navngitte språk i opplæringa. Det er imidlertid stadig flere studier som retter oppmerksomhet mot transspråking som mangesemiotisk kommunikasjon og meningsskaping (Canagarajah, 2018a; Wedin, 2021; Wedin et al., 2018; Williams, 2022). Eksempelvis har Wedin (2021) undersøkt matematikkopplæring for nyankomne voksne innvandrere i Sverige, og viser hvordan bruken av flere språk og flere modaliteter, herunder kroppsspråk, gester og ulike matematiske representasjoner, styrker elevenes forståelse og meningsskaping. Lignende funn gjør Williams (2022) i sin undersøkelse av andrespråksinnlæreres transspråking i naturfag i Hong Kong. Hun finner at blant annet bruk av gester og modeller er sentrale i og for elevenes meningsskaping (s. 1311). Vår studie knytter an til og utgjør et bidrag til denne delen av transspråkingsforskninga.

Samtale som transspråking

Samtaler mellom elev og lærer er undersøkelsesobjekt i denne studien. Ansikt-til-ansikt-samtaler er i seg sjøl mangesemiotiske og kan slik sett hevdes å være transspråklige, idet de er kroppsliggjorte og kontekstualiserte: "Samtalepartnerne befinner seg på samme sted, de ser hverandre, og de ser det samme. Dermed kan de ta i bruk mange flere kommunikative ressurser for å forstå og gjøre seg forstått" (Kjelaas & Riis-Johansen, 2022, s. x). En slik forståelse av samtaler som sammensatte er etablert i samtaleforskning. Eksempelvis beskriver Gumperz (1982) tre sett av ressurser som alle bidrar i muntlig meningsskaping: *verbale* ressurser, altså ord og formuleringer, *paralingvistiske* ressurser, det vil si alt som direkte akkompagnerer det verbale – som intonasjon, trykk, rytme og tempo, og *nonverbale* ressurser, som kroppsspråk, gester, blick og berøring. Transspråkingsforskere utvider dette ved også å inkludere omgivelser, representasjoner og objekter (Canagarajah, 2018; Wedin, 2021; Zhu et al., 2020). Felles for

både samtale- og transspråkingsforskerne er at de legger til grunn at alle disse ulike ressursene for meningsskaping virker sammen, samtidig, og at de derfor må ses i sammenheng.

I vårt prosjekt er ett objekt særlig sentralt, nemlig elevenes sjøllagde modeller av huden. Modeller er visuelle eller fysiske framstillinger som bidrar til å visualisere og konkretisere fenomener og sammenhenger. De har som formål å redusere kompleksiteten i fenomenet, og bidra til å klargjøre teorier, tanker og forståelse (Mathiassen, 2015, s. 210–211). Modeller er derfor mye brukt i pedagogisk sammenheng, og mange finner at de er ei viktig støtte i elevers og studenters læringsprosess (Canagarajah, 2018; Newman et al., 2018; Robles-Moral et al., 2023; Williams, 2022). Dette gjelder ikke minst i natur-/realfag, fordi mye av læringa i disse faga innebærer forståelse av prosesser som det er enklere å illustrere og forstå visuelt og/eller fysisk, enn verbalt (Williams, 2022). Newman og kolleger (2018) finner at bruken av fysiske modeller ga biologistudentene en dypere forståelse enn andre læringsaktiviteter, fordi det ga mulighet for å ta i bruk ulike sanser. Canagarajah (2018) gjør lignende funn, men framholder at det at elever/studenter utvikler *egne* modeller, er særlig hensiktsmessig for tenkninga og læringa deres. I en undersøkelse av en student som lagde en visuell modell av en biologisk prosess, finner han at det å utforme modellen endra studentens forståelse av prosessen på grunnleggende måter. Sjøllagde modeller blir dermed ikke bare en representasjon av "prekonstruerte ideer", men er i seg sjøl formende for tenkning og kommunikasjon (s. 42). Williams' (2022, s. 1311) skille mellom det muntlige (det vil si det verbale), gestiske (eng. "gestural") og taktile er nyttig i beskrivelsen av elevers faktiske, fysiske bruk av modeller. Mer konkret beskriver begrepet *taktil representasjon* (eng. "tactile representation") elevenes berøring, håndtering, manøvrering og reposisjonering av en modell/ting for å skape mening og formidle forståelse (Williams, 2022).

Modeller er nært forbundet med bruk av gester, slik vi så i det innledende eksemplet, der både eleven, Jamila, og læreren, Anna, peker og viser med gester på hudmodellen. Gester regnes som svært sentrale i andrespråks-/flerspråklighetsfeltet, fordi de kan kompensere for manglende verbale ferdigheter i det nye språket (Blackledge & Creese, 2017; Smatrova & Lantolf, 2013; Unsal et al., 2018). I norsk sammenheng finner for eksempel Hoff-Blyseth (2024) at gester utgjør en viktig medieringsstrategi for lærerne i ei innføringsgruppe for nyankomne elever på barnetrinnet. Gjennom videobasert interaksjonsanalyse viser hun hvordan lærernes bruk av gester og tegn i undervisning "bidrar til å iscenesette betydninger av ord som formidles" (s. 38, kursiv i original), noe som støtter elevenes forståelse. Dette er i tråd med Williams' (2022) funn fra studien om elevers transspråking i naturfag. Hun beskriver gestene elevene bruker, som "bridges that filled linguistic gaps" (s. 1319, og finner at ikke-verbale modaliteter gir andrespråksinnlærerne alternative

strategier for meningsskaping, stillaseringsmuligheter, stimuli for språkbruk og økt faglæring (Williams, 2022, s. 1306). Lignende funn gjør Kuvås (2024) i sin undersøkelse av nyankomne elevers bruk av gester i gruppesamtaler. Gestene støtter elevenes meningsskaping både kognitivt og kommunikativt, og fungerer blant annet som støtte for egen tenkning, støtte i egen språkbruk, og som interaksjonell støtte.

Gester kan kategoriseres på ulike måter. Stam (2018, s. 50) skiller mellom taleakkompagnerende gester (eng. "co-speech gestures"), taletilkobla gester (eng. "speech-linked gestures") og emblemer (eng. "emblems"), det vil si gester brukt som symbol (alle oversettelser er våre). De *taleakkompagnerende* gestene er den mest sentrale formen for gester, og er dem vi har fokus på i denne studien. Disse gestene er synkrone med talen og opptrer gjerne i forbindelse med ny, kontrastiv eller fokusert informasjon (Stam, 2018, s. 51). De komplementerer talen enten ved å uttrykke det samme, eller ved å uttrykke noe taleren tenker, men ikke uttrykker verbalt. På den måten gir tale og taleakkompagnerende gester et mer komplett bilde av talerens tenkning (Stam, 2018, s. 51). De taleakkompagnerende gestene kan kategoriseres ytterligere ut fra den semiotiske funksjonen de har: om de refererer til noe, peker på/ut noe, understreker noe, eller fungerer interaksjonelt, altså påvirker samtalen form og forløp (s. 53).

Oppsummert legger vi til grunn at samtalen mangesemiotiske karakter, modeller og gester er viktige ressurser i nyankomne elevers meningsskaping og formidling, og i læreres støtte til elevene. I analysen trekker vi særlig veksler på Canagarajahs (2018), Williams' (2022) og Stams (2018) tenkning om henholdsvis modeller, og samspillet mellom det verbale, taktile og gestiske, herunder ulike former for taleakkompagnerende gester.

Metode og materiale

Studien som denne artikkelen bygger på, har et lingvistisk etnografisk design. Lingvistisk etnografi er en metodologi som kombinerer lingvistiske og etnografiske innsamlingsmetoder og analyser (Lefstein & Snell, 2019), og er ansett som særlig egna i undersøkelser av samtaler i skolen, fordi den både omfatter næranalyser som gjør det mulig å identifisere "små", subtile interaksjonelle trekk, og breiere analyser av sammenhengen kommunikasjonen inngår i. I slike studier bruker en gjerne lyd- og/eller videoopptak, som er gjenstand for næranalyse av det som sies og gjøres, slik vi gjør i denne studien.

Materialet vårt er innhenta i en klasse på vg3, det vil si tredje året i videregående skole, på utdanningsprogrammet hudterapi. Skolen deltok i et kompetanseutviklingsprosjekt, kalt *Desentralisert kompetanseutviklingsprosjekt* (heretter DEKOM), fra 2022 til 2024. DEKOM-modellen har som formål at deltakerskolene og lærerutdanningene som deltar, skal ha et gjensidig faglig

utbytte: Behovet for kompetanse skal være forankra i vurderinger ved den enkelte skole, gjøres i "faglig dialog med universitet eller høyskole", og "[u]niversiteter og høyskoler som bidrar i kompetanseutviklingen, skal legge til rette for at erfaringene fra partnerskapet styrker lærerutdanningene" (Udir.no, 2023, u.s.). I det aktuelle prosjektet innebar dette at vi fra lærerutdanninga 1) bidro med faglige innspill i form av kartlegging av kompetansebehov, planlegging av kompetanseutviklingsmodell, og forelesninger/workshops på samlinger med deltakerskolene, 2) hadde tett dialog med flere av lærerne og lederne om faglige spørsmål underveis, og 3) samla data med tanke på egen kunnskapsutvikling ved fem av skolene.

Dette siste blei definert som et eget forsknings- og utviklingsprosjekt, (*Andre*)språk på yrkesfag, med mål om å undersøke språkpraksiser, språkkrav og språkopplæring på yrkesfaglige utdanningsprogram. Datainnsamlinga i prosjektet har så langt bestått av observasjon av undervisning og vurderingssituasjoner, lyd- og videoopptak av samtaler, uformelle samtaler og mer formaliserte intervju med elever, lærere og skoleledere, foto av klasserom, utstyr og elevarbeid, og innhenting av planer, oppgaver og så videre ved til sammen fem skoler. I denne artikkelen analyserer vi lydopptak og feltnotat fra observasjoner fra til sammen tre individuelle lærer-elev-samtaler. Kontekstuell kunnskap om skolen, elevene og opplæringa innhenta gjennom uformelle samtaler og observasjon utgjør et sekundærmateriale. Dette analyseres ikke i sin egen rett, men utgjør ei viktig kontekstualisering.

Bakgrunnen for utvalget av akkurat hudterapiutdanninga som case, var uformelle samtaler med læreren Anna om hennes undervisnings- og vurderingspraksis, i forbindelse med DEKOM-prosjektet. Anna underviser i programfaget Helsefremmende arbeid og er særlig opptatt av muntlighet – både som *mål* for og som *middel* til læring. Hun mener at hudterapeutyrket er et muntlig-praktisk yrke som primært stiller krav til muntlig kompetanse, og at elevene får demonstrert mer kunnskap gjennom muntlig enn skriftlig vurdering. Hun sier blant annet:

... målet er jo at de skal få vise hva de kan. Det er jo ikke at jeg skal vise alt de ikke kan. Også synes jeg det er fint med det muntlige fordi jeg kan tilpasse spørsmålene ut ifra hvordan de svarer, og hvordan jeg kjenner dem, slik at de kan oppleve mestring. Vi kan ikke stille den ene veldig vanskelige spørsmål som jeg vet ikke kan det. Men de som er faglige sterke kan jeg stille de her sammenheng-spørsmålene på en annen måte, da. Og det får man heller ikke til på en skriftlig vurdering.

Hun forteller dessuten at hun ser på vurderingssamtaler som hensiktsmessige, fordi de innebærer både vurdering og opplæring: Hun er ikke bare ute etter å vurdere hva elevene allerede kan i disse samtalene, men også av å oppklare, forklare og utdype faginnhold. Denne vektlegginga av og bevisstheten om

samtalens rolle i opplæring og vurdering vekka vår interesse og var bakgrunnen for at vi valgte å undersøke Annas praksis nærmere.

Første- og andreforfatter observerte, tok feltnotat og lydopptak av fem vurderingssamtaler, hvorav de tre med nyankomne elever blei valgt ut for analyse. Feltnotata var detaljerte, særlig når det gjaldt transspråklige trekk, det vil si bruk av ulike semiotiske ressurser (inkludert bruken av modellen) og flere språk. Forskerteamet lytta til de utvalgte vurderingssamtalene gjentatte ganger og justerte transkripsjonen etter hver gjennomlytting. Når de fem utdraga som analyseres var valgt, lytta vi på nytt på disse, med særlig fokus på nyanser som pauser, uttrykk for tvil, ordleiding, sjøkkorrigeringer og lignende. Vi valgte en enkel transkripsjonsnøkkel, der korte pauser markeres med ellipse, slik: ..., trykk markers med kursiv (som i *denne* og *der*), spørreintonasjon med spørsmålsteget (?) , entusiasme med utropsteget (!), mens nonverbale trekk beskrives i parentes (som i (peker)). Transkripsjonen er ortografisk og følger skriftspråklige normer, blant annet med bruk av tegnsetting som komma og punktum. Dette er valgt for å gjøre transkripsjonen mer lesbar, og fordi en mer detaljert samtaleanalytisk transkripsjon ikke var nødvendig eller egna for å belyse temaet for studien.

Materialet blei analysert i en stegvis prosess, der forskerteamet på fem altså lytta til opptaka av vurderingssamtalene og intervjuet, og leste feltnotata gjentatte ganger. Analysen var med andre ord *abduktiv* (Tjora, 2017, s. 33). Den var empiridrevet og empirinær, samtidig som fokus var teoretisk motivert.

Analyse

På bakgrunn av den innledende analysen identifiserte vi tre framtrepende dimensjoner ved elevenes og lærernes transspråking: begge parter bruk av *modellen*, begge bruk av *gester* og elevenes bruk av *flere språk*. Disse dimensjonene strukturerer analysen, som belyser hva som kjennetegner bruken av henholdsvis modell, gester og flere språk, og hvilken funksjon denne bruken synes å ha for elevenes forståelse, meningsskaping og formidling.

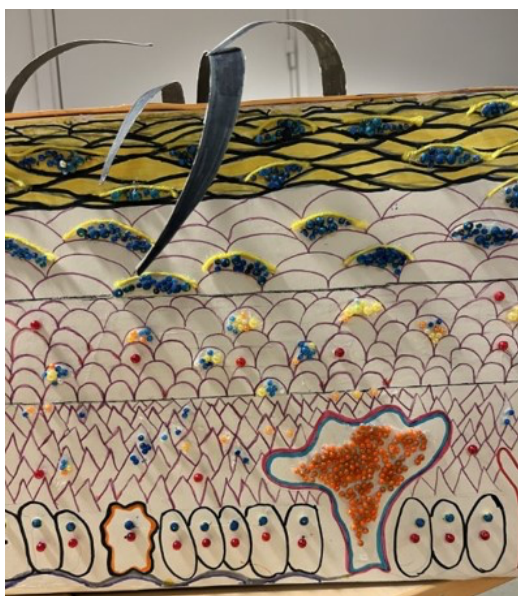
Bruk av modell

Elevene og læreren Anna bruker som beskrevet hudmodellen aktivt i samtalene. I det følgende ser vi nærmere på utdraget fra innledningen, der Jamila forklarer oppbygningen av huden og oppgavene til de ulike cellene, mens hun peker, viser og tar på hudmodellen (figur 1):

Utdrag 1:

1. Da vi kan bare starte fra ... ehm, sånn ... overhuden. Da vi starte basalcellelaget,
2. som vi ser her (peker på modellen). Egentlig ..., her (peker) har vi keratinocytter,
3. her (peker) har vi merkelceller. Keratinocytter er jo på en måte som protein i
4. huden, som vi trenger i hele kroppen. Vi har i negler, hår, huden. Ehm ...

5. Merkelceller, er jo på en måte ... det er sanseceller som det ..., som på en måte
6. send, eh ..., beskjed til sentralnervesystem, når det som nåkka skjer i kroppen.
7. Eh ... Her (peker) er keratinocytter, her (peker) er melanocytter. Dem strekker
8. opp... eh ... oppover til torncellelaget (viser med bevegelse oppover på
9. modellen). Eh ..., på en måte er jo det farge på en måte, som vi har fått med
10. (peker). Det gir farge til hele kroppen, hår og sånne ting. Her (peker) e jo
11. langerhanske celler. Dem strekker opp seg til torncellelaget. Eh ... Armene vi
12. kaller det ... den ..., dendeter, eller noe sånn.



Figur 3. Ei av sidene i Jamila og Seldas hudmodell.

Jamila starter med å ta for seg overhuden, som er det øverste laget i huden, og beskriver oppbygninga av basalcellelaget, den nederste delen av overhuden, mens hun peker og viser på modellen. Hun navnsetter de ulike bestanddelene, merkelcellene og keratinocytterne (linje 1–3), og beskriver funksjonen deres, for eksempel "keratinocytter er på en måte som protein i huden" (linje 3–4). Deretter beskriver hun melanocytter (linje 7–8), hvordan de "strekker opp ... [...] oppover til torncellelaget", noe hun samtidig viser med å bevege hånda oppover på modellen, og at det "er farge på en måte" (linje 9). I forbindelse med denne beskrivelsen, kommenterer hun og peker på modellen "som vi har fått med" (linje 9), som viser til at hun og Selda, medeleven hun har lagd modellen sammen med, har brukt farge for å illustrere melanocytterne.

Jamila ser, holder, snur og peker hele tida på modellen mens hun snakker. Hun bruker med andre ord verbale, gestiske og taktile strategier samtidig (Williams, 2022). Det er tydelig at hun kjenner modellen godt. Hun håndterer den

på en innforstått måte og veit hvor hun skal leite når hun synes å stå fast eller tenker seg om, og hvilke "hint" som er lagt inn i modellen i form av materialer, fargebruk med mer (jf. figur 3). Ut fra måten Jamila bruker modellen på mens hun snakker, fortolker vi det som om den har flere funksjoner i formidlinga hennes: Den *strukturerer* for det første framstillinga, både overordna i og med modellens inndeling i de tre hudlaga, slik vi ser i den første ytringa og pekinga hennes: "Da vi kan bare starte fra ... ehm, sånn ... overhuden", og lokalt i det enkelte laget når hun går gjennom de ulike delene. Det synes også som at modellen *støtter* både hukommelsen og språket hennes. Når hun tar pauser, virker det som om hun tenker og leiter etter kunnskap og/eller ord. Ved å se på tegninga av de ulike cellene og rekkefølgen på dem på modellen, synes det som om hun får hjelp til å komme på begrepsinnholdet, hva slags type celle det dreier seg om, og hvilken funksjon den har, og til å finne ordet – hva den heter. Måten illustrasjonene er utforma på, bidrar til dette, noe Jamila sjøl antyder når hun sier at hun og medeleven Selda har brukt farge når de illustrerte melanocytene som nettopp har som funksjon å gi farge til hår og hud. Smotrova og Lantolf (2013), som har forska på bruk av gester i andrespråksopplæring, sier at kombinasjonen av det verbale og gestiske utgjør et godt medieringsverktøy som gjør det mulig for elever å visualisere detaljer i forståelsen av ords betydning, som ikke kommer fram gjennom det verbale mediet aleine (s. 397). Modeller gir i tillegg konkret visuell støtte i form av illustrasjoner, og mulighet for å bruke taktile strategier, og de kan slik sett hevdes å utgjøre et enda sterkere medieringsverktøy.

En ferdig modell av huden ville også utgjort et godt medieringsverktøy og gitt Jamila viktig støtte (jf. f.eks. Newman et al., 2018). Samtidig synes det som om det at Jamila (og Selda) sjøl har lagd modellen gir et eierskap som gir ytterligere støtte, jamfør Canagarajah (2018b) som framholder at det er særlig hensiktsmessig at elevene sjøl utformer modeller. Canagarajah er primært opptatt av at dette bidrar til forståelse og læring, og at modeller derfor må forstås som performative, ikke representasjonelle: De viser ikke bare en ferdig kunnskap, men bidrar til å utvikle og forme forståelsen (Canagarajah, 2018b, s. 42). Vår tolkning er at den sjøllagde modellen i tillegg gir bedre støtte i elevens *formidling* av faglig kompetanse, fordi de har valgt materialer, farger og så videre sjøl – med utgangspunkt i egen forståelse og i hva de derfor sjøl ønsker å ha som støtte, og fordi de veit hvor alt befinner seg. Det at modellen er sjøllagd og kjent for elevene, har dessuten nok en positiv funksjon, nemlig at det gir trygghet i vurderingssituasjonen.

Jamilas redegjørelse for oppbygginga av overhuden er et eksempel på hvordan modellen fungerer som støtte for *eleven*, i en monologisk sekvens. Modellen er imidlertid også en viktig ressurs for *læreren* og i dialogen mellom henne og elevene. Dette ser vi eksempel på i det neste samtaleutdraget, hvor

Jamila og Anna snakker om et bestemt hudcellelag, det lysbrytende cellelaget, hvor Jamila hevder at det foregår en celledifferensieringsprosess:

Utdrag 2:

1. **Anna:** Er cellene døde eller levende *her*? (peker øverst oppe på modellen)
2. **Jamila:** Nei, de er døde.
3. **Anna:** De er døde. Men hvis cellene er døde, hvordan kan cella dele seg?
4. **Jamila:** Da skjer ikke celledeling. Vent ... Her skjer det bare celledifferensiering.
5. **Anna:** Hva er celledifferensiering, da?
6. **Jamila:** Celledifferensiering. Vi endrer form og struktur.
7. **Anna:** Men endrer den form og struktur i de cellelagene *her*? (peker på mod.)
8. **Jamila:** Ja, fordi de blir litt flatere.
9. **Anna:** Blir de flatere i *denne* (peker) og flatere *der*? (peker)

Anna starter her med å peke på et bestemt sted på modellen, samtidig som hun legger trykk på ordet "*her*" med spørreintonasjon, for å klargjøre om hun forstår eller misforstår Jamila: "Er cellene døde eller levende *her*?" (linje 1). Jamila gjentar at cellene er døde, hvorpå Anna stiller et (ledende) oppfølgingsspørsmål: "Men hvis cellene er døde, hvordan kan cella dele seg?" (linje 3). Jamila blir mer nølende: "Da skjer ikke celledeling. Vent ..." (linje 4), og foreslår i stedet at det kun skjer celledifferensiering (linje 4). Anna følger opp med å spørre hva celledifferensiering er (linje 5), og Jamila svarer at det innebærer endring i form og struktur (linje 6). Anna følger opp ved å spørre "Men endrer den form og struktur i de cellelagene *her*?" (linje 7). Her peker hun igjen på modellen og legger trykk på "*her*". Jamila prøver seg fram igjen med å si noe om at cellene blir flatere, hvorpå Anna spør om cellene blir flatere i "*denne*" og "*der*" (linje 8–9).

Anna tar i bruk både verbale, gestiske og dels taktile strategier i denne sekvensen, og denne transspråkinga er hele veien sentrert rundt modellen: Hun bruker ord som "*her*", "*den*" og "*denne*" med henvisning til bestemte steder på modellen, hun uttaler disse orda med tydelig trykk og/eller spørreintonasjon, hun gestikulerer i form av peking på modellen, og hun holder i og snur på modellen for å vise. Som for Jamila i forrige utdrag, er modellen på denne måten en viktig støtte for Anna – og dermed naturligvis også i sin tur for Jamila. Modellen støtter Anna i forsøka på å få Jamila til å oppklare og forklare hvilken prosess som faktisk skjer i det lysbrytende cellelaget. Uten modellen (eller annen visuell støtte) ville Anna kun hatt det verbalspråklige å støtte seg på når hun skulle ha oppklart misforståelsene og fått Jamila til å resonnerer seg fram til riktig svar. Dette ville ha krevd større verbalspråklig presisjon, der eksempelvis "*denne*" og "*der*" måtte vært erstatta med navnet på den spesifikke cella eller celledelen det dreide seg om. Dette ville i sin tur kunne ha gjort det mer krevende for Jamila å forstå. Williams (2022) beskriver hvordan elever med begrensa verbalspråklige ferdigheter i opplæringspråket bruker demonstrative

pronomen som "denne", "der" og "disse tinga", i kombinasjon med taktile strategier for å erstatte de nødvendige verbale representasjonene (s. 1317). I vårt tilfelle gjør læreren det samme, noe vi fortolker som en viktig medieringsstrategi, altså en strategi for å "hjelp elevene med å utvikle nye ferdigheter og forståelse" (jf. Hoff-Blyseth, 2024, s. 11) – eller til å vise den forståelsen de allerede har.

Anna kan på den ene sida sies å *forenkle* den verbalspråklige belastninga ved å bruke demonstrativer, paralingvistiske signaler som tydelig trykk, gester og taktile strategier. Samtidig kan en tolke det hun gjør, som ei *utviding* og *styrking* av Jamilas forståelse av innholdet i sentrale fagbegrep: Jamila kan få økt forståelse for begrepa celledød, celledifferensiering, celledeling og cellers endring av struktur og form gjennom samtalen. Gjennom Annas spørsmål og respons, utfordres begrepsforståelsen hennes, og gjennom de gestiske og taktile strategiene knytta til modellen, synes den å bli utvida. I lys av Smatrova og Lantolf (2013) sine funn, kan en dermed si at kombinasjonen (sjøllagd) modell og verbal, gestisk og taktil lærerstøtte til sammen er et effektivt medieringsverktøy som bidrar til en begrepsforståelse som det er mer krevende å utvikle gjennom det verbalspråklige aleine. Her kan det riktig nok innvendes at samtalerne som undersøkes, er *vurderingssamtaler*, ikke *læringssamtaler*. Dette er imidlertid et kunstig skille både for den spesifikke læreren Anna, som har som mål at vurdering også skal bidra til læring (jf. metoddelen), og teoretisk, jamfør Canagarajah (2018b), som framholder at modeller både er representasjonelle og performative – både representasjoner av *eksisterende* kunnskap og formende for *ny* kunnskap.

Bruk av gester

Som vi har sett er bruken av modellen og gester tett sammenvevd – de utfyller hverandre og fyller mange av de samme funksjonene. Ulike typer *taleakkompagnerende gester* – gester som er synkrone med talen (Stam, 2018), kan for eksempel være deiktiske/pekende, metaforiske eller ikoniske. Når Jamila i det første utdraget (utdrag 1) peker mot bestemte deler av modellen sin og sier: "(...) her (peker) har vi keratinocytter, her (peker) har vi merkelceller" (linje 2–3), viser hun fram ny, fokusert informasjon, med en bestemt plassering på modellen. Hun bruker deiktiske gester til å strukturere formidlinga si, ved at hun først peker på keratinocyttenes plassering i huden, før hun deretter følger opp med en faglig utdyping: "Keratinocytter er jo på en måte som protein i huden, som vi trenger i hele kroppen. Vi har i negler, hår, huden (...)" (linje 3–4). Utdrag 3 er fortsettelsen på denne sekvensen (fra utdrag 1) med Jamila. Her forsøker Jamila å navnsatte "armene" til de tidligere nevnte langerhanskecellene. Hun leiter etter den riktige fagtermen og prøver seg fram med ulike ord:

Utdrag 3:

- 11–12. **Jamila:** Eh... Armene vi kaller det ... den..., dendeter, eller noe sånn.”
13. **Anna:** Den ... (gestikulerer med sideveis sirkelbevegelser med høyre hånd)
14. **Jamila:** Denteter?
15. **Anna:** Dendritter, ja.

Jamila kommer ikke på det aktuelle ordet (linje 11–12), men Anna følger opp med: ”Den ...” samtidig som hun gestikulerer med sideveis sirkelbevegelser med den høyre hånda, noe som gjør at Jamila fortsetter å snakke (linje 13–14). Disse taleakkompagnerende gestene har en metaforisk karakter: De kan tolkes som en metafor for det å skulle fortsette å snakke. Dette fungerer som en bekreftelse overfor Jamila, om at hun nærmer seg det ordet hun søker etter. Slik ser vi at Annas metaforiske gestikulering bidrar til felles meningsskaping – i den forstand at Jamila tidligere har vist forståelse for funksjonen til de nevnte ”armene”, til tross for at hun ikke husker ordet ”dendritt”. Anna hjelper henne med å bygge bro mellom begrepsinnhold og ord, og hun kan på denne måten sies å strekke norskferdighetene til Jamila (Gibbons, 2015). I tillegg spiller Annas metaforiske gestikulering en interaksjonell rolle – både i kraft av å gi Jamila bekreftelse på at hun er på riktig vei, men også ved å legge føringer for turtakinga i samtalen.

Også Rojin og Anna bruker ulike taleakkompagnerende gester aktivt. I det følgende utdraget utfordres Rojin til å forklare forhorningsprosessen (det vil si ”en prosess der hudcellene i overhuden fylles opp av keratin, dør og blir til en beskyttende barriere” (SNL.no, 2024)):

Utdrag 4:

1. **Anna:** Hva skjer med den døde huden etter hvert, da?
2. **Rojin:** Da presser ut overhuden
3. **Anna:** Ja! Og hva skjer med overhuden etter hvert? Hva er siste del i
4. forhorningsprosessen? Hva skjer med den døde huden etter hvert?
5. Når du får ny hud så ...? (gestikulerer med en sideveis sirkelbevegelse
6. med høyre hånd)
7. **Rojin:** Prøver å starte på ny
8. **Anna:** Ja, men hva skjer med den gamle huden, da? Som ligger oppå her
9. (peker og stryker seg sjøl på armen), husker du det?
10. **Rojin:** Nei, jeg husker det ikke.
11. **Anna:** Jo, tenk helt logisk. Du sier at huden dør, okei. Det kaller du
12. apoptose, sant? Men hva skjer når huden har dødd? (Stryker over sin
13. egen arm)
14. **Rojin:** De har fylt opp med keratin.
15. **Anna:** Den har fylt opp med keratin. Men hva skjer med huden? Blir det
16. mange lag oppå hverandre? (legger den ene hånda over armen). Når
17. huden dør?
18. **Rojin:** Ja, det blir det. Det er mange lage (legger hånda over armen på samme
19. måte som Anna)
20. **Anna:** Ja, hvor lang tid tar denne prosessen, da?

21. **Rojin:** Tre til fire uker.
22. **Anna:** Hva skjer etter fire uker? Når cella er død? Da blir det masse hud,
23. men hva er det siste som skjer med huden? Etter cella har dødd? (lar
24. hånda «falle» fra armen)
25. **Rojin:** Faller ut. (Lar hånda falle ned fra armen på samme måte som Anna)
26. **Anna:** Ja (leende), den faller død av! Den ramler av. (vifter med hånda over
27. armen)

Anna har stilt Rojin et spørsmål om hva som skjer med den døde huden, og Jamila svarer at "Da presser ut overhuden" (linje 1–2). Anna følger opp med spørsmål og signaliserer med ordet "så" etterfulgt av en pause og en sideveis sirkelbevegelse med høyre hånd at Rojin skal fortsette å snakke (linje 4–5). Rojin svarer, men Anna er tilsynelatende ikke fornøyd med svaret (linje 8–9). Samtidig som Anna fortsetter å spørre spesifikt om hva som skjer med den gamle (døde) huden, bruker hun en gest: Hun peker og stryker seg sjøl på armen (linje 9). Rojin forblir usikker: "Nei, jeg husker det ikke" (linje 10). I de påfølgende bidraga til Anna fortsetter hun å stryke seg sjøl over armen, og viser med det hvordan huden legger seg i lag på lag på armen, dør og flasser av (linje 9, 12 og 16). Dette synes å støtte Rojins hukommelse og tankeprosess (linje 18–19). I de påfølgende bidraga er Rojin kommet "på rett spor" og utdyper hva som skjer når hudcellene dør (linje 21 og 25).

Annas taleakkompagnerende gester har som antyda flere funksjoner i denne sekvensen. Gesten hun bruker innledningsvis fungerer *interaksjonelt*, som signal om at Rojin skal fortsette. Videre bruker Anna det vi tolker som en serie av ikoniske gester, altså gester som kan assosieres med konkrete materialer og prosesser, og som står i et transparent forhold til det de refererer til (Williams, 2022, s. 1311). Disse beskriver og konkretiserer prosesser som kan oppleves som abstrakte, eller som eleven bare ikke husker, i vårt tilfelle at huden legger seg lag på lag, og at hudcellene til slutt flasser av. Rojin tar sjøl i bruk de samme gestene etter at Anna har introdusert dem (linje 18–19 og 25), og både Annas og hennes egen bruk av disse gestene synes å støtte hukommelsen hennes: Hun kommer på hva som skjer med de døde hudcellene, og er i stand til å formidle det. Dette resonerer med funna i Kuvås' (2024) studie av nyankomne elevers bruk av gester. Også hun fant at gester syntes å spille en viktig rolle for dem *kognitivt*: Både deres egen og samtalepartnerens bruk støtta hukommelsen og forståelsen deres (s. 40), slik vi ser i samtalen mellom Rojin og Anna.

Samla sett bidrar den interaksjonelle gesten innledningsvis og de ikoniske gestene underveis til det vi kan kalle ei interaktiv synkronisering mellom Annas og Rojins tale og bevegelser. Stam (2018) sier at en kan forstå samtaler som en dans, der taler og lytter beveger seg i takt med hverandre, og deres gester og ytringer opptrer i harmoni. Rojin "danser" i takt med Anna når hun oppfatter og handler på signalet om å fortsette å snakke (linje 7), og når hun imiterer Annas

bevegelser for å vise forståelse (linje 18–25). Slik bidrar gestene samla sett til "the expression of ideas, the mediation of language and the unaided flow of discourse" (Williams, 2022, s. 1304).

Bruk av flere språk

I tillegg til bruk av modeller og gester, legger Anna til rette for at elevene kan bruke eget førstespråk, eller andre språk de kan, i vurderingssamtalene. Dette ser vi eksempel på i denne samtalesekvensen mellom Selda og Anna.

Utdrag 5:

1. **Selda:** Den kommer som...
2. **Anna:** *Den?* (peker på modellen) Var det den du tenkte?
3. **Selda:** Ja, den kommer celler som overhuden, overflata, den kommer.
4. **Anna:** Ja, og hva skjer med de cellene som er på huden din?
5. **Selda:** Ja, jeg glemte det som begrep
6. **Anna:** Men du kan slå opp da, hvis du kan det på arabisk. Ja, det kan du (nikker)
7. **Selda:** "Kleser", som "kleser". (slår opp ordet på mobilen og sier det arabiske
8. ordet – utydelig uttale). At huden ramler av, sant at den detter av, og
9. starter på nytt.
10. **Anna:** Starter på nytt, ja. Da kan du bare fortsette.

Selda har kunnskap om hva som skjer med cellene på huden, men har "glemt det som begrep" (linje 5). Anna oppfatter umiddelbart hva Selda mener og oppfordrer henne både verbalt og nonverbalt til å slå opp ordet på mobilen: "Men du kan slå opp da [...] ja, det kan du", sier hun og nikker (linje 6). Selda finner det riktige ordet – "deskvamasjon" – på arabisk og oversetter det med "at huden ramler av, sant at den detter av og starter på nytt" (linje 8–9). Anna bekrefter at dette er riktig forstått, og oppfordrer Selda til å fortsette (linje 10). Også denne bruken av førstespråk tjener flere funksjoner: Den bidrar for det første – og aller viktigst – til at Selda får vist kompetanse. Hun forstår at det dreier seg om ordet deskvamasjon, så hun har åpenbart forstått hva Anna er ute etter – hun kan bare ikke det latinske ordet (som er det som brukes i faglig sammenheng i norsk). Ved å bruke førstespråket sitt får hun altså vist den faglige kompetansen sin til tross for manglende ordforråd på latin/norsk. Mange flerspråklighets- og transspråkingsstudier peker, som vi så innledningsvis, på at bruk av flere språk gir andrespråksinnlærere som Selda bedre mulighet til å forstå, delta, lære og mestre (f.eks. Andreassen, 2024; Canagarajah, 2018; García & Wei, 2019). García og Wei (2019) sier transspråking gir elevene flere og mer aldersadekvate kognitive, kreative og kritiske utfordringer. De finner at stadig flere skoler og lærere anerkjenner dette og legger til rette for bruk av flere språk som stillasering i opplæringa. Transspråking er imidlertid fortsatt uvanlig i vurdering (García & Wei, 2019), noe som gjør at fagkompetanse ofte forveksles med språkkompetanse, og at det å ha en annen språkbakgrunn blir ei begrensning. Den korte

sekvensen mellom Selda og Anna viser hvordan en transspråkingspedagogisk vurderingspraksis motvirker dette. Anna sier sjøl at målet med vurdering er at elevene "skal få vise det de kan" (jf. metodedelen). Bruken av flere språk bidrar til det.

Bruken av språk eleven mestrer i opplæring og vurdering, er særlig viktig når læringsinnholdet og fagspråket er nytt og utfordrende. Yrkesfaglige utdanningsprogram, som hudterapi, innebærer som vi har sett i denne analysen, tilegnelse og bruk av et spesifisert fagspråk med mange nye fagtermer – både på norsk og latin. Andreassen (2024) har undersøkt overgangen fra kombinasjonsklasser til yrkesfag for nyankomne ungdommer og beskriver hvordan den nyankomne eleven Hamid erfarer at behovet for støtte i førstespråket øker når han starter på yrkesfag, blant annet fordi yrkesfaget innebærer bruk og tilegnelse av et helt nytt fagspesifikt språk, som han verken kjente til på norsk eller på førstespråket sitt. En kan anta at det samme gjelder for Selda og hennes medelever.

Diskusjon

Med det store antallet nyankomne minoritetsspråklige elever på yrkesfaglige utdanningsprogram, er det avgjørende at opplæringa innebærer mest og best mulig støtte, slik at elevene kan delta, lære, mestre og vise kompetanse sjøl om de er i en innlæringsfase av norsk. I denne artikkelen har vi belyst hvordan transspråkingspedagogikk utgjør ei hensiktsmessig tilnærming for denne elevgruppa. Ved å bruke en sjøllagd modell, gester og flere språk i vurderingssamtaler kombinerer elevene og læreren verbale, gestiske og taktile ressurser, og øker på den måten muligheten for meningsskaping og formidling av kompetanse.

Mer konkret finner vi at modellen bidrar til å *strukturere* elevenes formidling, og til å *støtte* dem til å huske både innhold i og ord for sentrale fagbegrep. Det at modellen er sjøllagd, gir dessuten et *eierskap* og en *trygghet* i en ellers stressende situasjon. Også for læreren gir modellen mulighet for å *redusere den verbalspråklige belastninga*, ved å peke, vise og bruke paralingvistiske strategier for å oppklare misforståelser og få eleven på rett spor. Samtidig gir det læreren mulighet til å *utvide elevens begrepsforståelse og ordforråd*. Modellen er nært forbundet med bruken av gester, og vi finner at gestene både har en viktig *interaksjonell funksjon*; de signaliserer at eleven skal fortsette å snakke, ergo at hun er på rett spor, og de har en *ikonisk funksjon*; de illustrerer prosesser i huden som eleven ikke kommer på og/eller klarer å formidle på egen hånd. Endelig gir bruken av flere språk eleven mulighet til å formidle begrepsinnholdet i et fagbegrep hun ikke kom på på latin/norsk, noe som både gir mulighet til å *vise kompetanse* og til å *komme videre i resonnementet sitt og dermed i interaksjonen*. Oppsummert har altså den flersemiotiske transspråkinga læreren legger til rette for, både en viktig kognitiv, kommunikativ og interaksjonell funksjon i vurderingssamtalene (jf. Kuvås,

2024), og bidrar på avgjørende måter til å styrke elevenes mulighet for å kommunisere om fagstoff og vise kompetanse.

Vurderingssamtalene vi har undersøkt, kunne også ha foregått på et annet utdanningsprogram, inkludert studiespesialiserende program, og er slik sett ikke unike for yrkesfag. Bruk av modeller er ikke minst vanlig i naturfag (Williams, 2022), bruk av gester inngår i stort sett all muntlig kommunikasjon (Stam, 2018), og bruk av flere språk *bør* inngå i all opplæring i alle fag (f.eks. García & Wei, 2019). Det er imidlertid særlig gode grunner til – og særlig stort potensial for – å implementere transspråkingspedagogiske tilnærminger på yrkesfag (se også Andersen, 2024b). Anna, læreren i vår studie, beskriver sjøl hudterapiutdanninga som muntlig-praktisk, og dette er ett av argumenta hennes for å legge til rette for mye muntlighet i opplæringa (jf. metoddelen). Nettopp det muntlige, praktiske, kroppslige og visuelle som kjennetegner alle yrkesfag, gjør det til en spesielt godt egna arena for transspråkingspedagogikk forstått slik vi gjør det i denne artikkelen – som bruk av flere semiotiske ressurser (jf. f.eks. Zhu et al., 2020). Dette er også i tråd med Andersens (2024b) doktorgradsstudie om flerspråklighet på yrkesfag. Hun framholder at yrkesfaga i utgangspunktet er multimodale og praktiske, og ofte inkluderer fysiske og taktile elementer, og at det verbal-språklige kun utgjør en av mange måter å lære på.

Det er også viktig å legge til rette for transspråking på yrkesfag fordi de kommunikative krava her er høye, både i opplæringa og i yrkesutøvelsen. Yrkesfag antas ofte å kreve lavere nivå av språkferdigheter enn andre utdanningsprogram (Herrera et al., 2022, s. 23), noe som gjerne knyttes til disse fagas praksisnærhet. Denne antakelsen tar imidlertid ikke høyde for at yrkesfaga innebærer tilegnelse og mestring av ei rekke spesialiserte språklige og kommunikative ferdigheter (Andreassen, 2024; Filliettaz, 2022). Analysen vår viser eksempler på det omfattende fagspesifikke vokabularet elevene på vg3 hudterapi skal mestre, både på latin og norsk, og på krava til å redegjøre for og forklare prosesser i huden. I tillegg inngår et bredt sett av andre språklige og kommunikative ferdigheter. Filliettaz (2022), som har undersøkt språkets rolle på yrkesfag, sier at alle fag og yrker innebærer språkbruk og kommunikasjon som tjener både *operative, sosiale og kognitive funksjoner* (s. 104). Gjennom kommunikasjon får arbeidstakere ting gjort, de posisjonerer seg i grupper og etablerer fellesskap, og de bruker kommunikasjon for å huske, lære og løse problemer (s. 104).

I den kommunikative kompetansen som kreves, inngår både verbalspråklige ferdigheter, men også nonverbale, altså taktile og gestiske. Slik er transspråking ikke bare et middel, men også et *mål* for læring. Det å ha gode ferdigheter i og bevissthet om hvordan en bruker det gestiske og taktile i kommunikasjon, er en viktig kompetanse i sin egen rett. Dette gjelder ikke minst i "menneskeyrker", som helse- og oppvekstfaglige yrker. For eksempel vil kommunikasjon med små barn i en barnehage, eller demente på et sykehjem, innebære at en må trekke

veksler på andre ressurser enn de verbalspråklige. Men også generelt innebærer kommunikativ kompetanse, som er et mål i alle yrkesfaglige utdanninger (jf. Filliettaz, 2022), vesentlig mye mer enn å være god med ord i og for seg.

Også når det gjelder bruken av flere språk spesifikt, bør transspråking være et mål for læring på yrkesfag. Dette er i tråd med funna fra Mustonen og Strömmers (2022) studie fra helsefagarbeiderutdanninga i Finland. I tillegg til at transspråking bidro til elevenes faglæring, fant de at det styrka elevenes flerspråklige kompetanse, noe som var en ressurs for dem i yrkeslivet. Dette gjelder naturligvis også i Norge. Det arbeidslivet elevene skal ut i, blir stadig mer flerspråklig, og det er en styrke å ha profesjonsutøvere som mestrer flere språk – i alle fag og yrker. Filliettaz (2022) framholder at samfunnsendringene i retning mer språklig og kulturelt mangfold stiller nye krav til de yrkesfaglige utdanningene: "Disse endringene har betydelige konsekvenser for yrkes- og profesjonsutdanninga, som må "prepare and adapt the workforce not only to specific technical and work-related skills but also, more widely, to multilingual, globalised and language-mediated professional practices" (s. 104).

Jamila, Rojin og Selda er tre motiverte elever som ønsker å bli hudpleiere. Fordi de har kort botid i Norge, og fortsatt er i en innlæringsfase av norsk, møter de betydelige utfordringer i det norske utdanningssystemet. Transspråkinga læreren Anna legger til rette for, reduserer noen av disse utfordringene og bidrar til at de får videreutvikle og vise faglig og kommunikativ kompetanse. Det blir en *nøkkel til kompetanse* både for læreren og dem. På bakgrunn av vår analyse vil vi ta til orde for at flere nyankomne elever på yrkesfag får denne nøkkelen.

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Carving space for sustainable futures through vocational education and training: Why and how organisational choices and teaching practices matter

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Abstract

In this keynote from the 2025 NordYrk conference, I seek to reframe vocational education and training (VET) from employability towards liveability and offer a non-metric repertoire for legitimising civic and ecological purposes in practice. I do this by showing how VET is still largely organised around productivist logics, which leaves little room for non-economic purposes such as community well-being or care for the living world. Because of this, I suggest we reconsider what we value in VET. To widen what counts, I introduce three conventions of worth that could inform post-growth VET – civic (community and care), ecocentric (ecological embeddedness and sufficiency), and dialectical (critique, plurality, reflective judgement). Rather than metricisation, conventions of worth such as these rely on critical reflection and public justification to assess quality. In the next part I turn to teaching and propose carving space as pedagogy. I argue that three dimensions – time, place, and relationships – are particularly vital when teaching for sustainability and discuss some of the advantages that VET has over other education contexts. Lastly, I turn to the practical implications for academic work, arguing that the choices we make in research and teaching also play a role in shaping sustainable futures.

Keywords: education for sustainability, conventions of worth, place-anchored pedagogy, embodied learning, radical imagination, liveable futures



Introduction

In this keynote¹, I explore *what vocational education and training (VET) for sustainable futures might look like* – what are some critical foundations, what changes are needed, and which potentialities already exist within the contexts of Nordic VET? Drawing on current sustainability research from the field of VET and beyond, I will address how the interplay between educational design, organisational choices, and value regimes, as well as pedagogical choices, can *shape the potential of education*.

The argument proceeds in three parts. First, I examine the *values and implicit assumptions* embedded in today's VET and why they may need reorienting (Part I). Next, I consider how *pedagogy and place* matter for sustainability (Part II). Finally, I outline what academics can contribute to this work (Part III).

Part I: Why do we have to reorient our values and transform our systems?

First, let us establish *the bigger picture*. Our planet is changing, moving towards greater instability and a hotter climate (Thomas, 2022). These are changes caused by human activity and how we proceed will matter greatly for exactly how instable and hot the planet will get and how quickly. Though it might be hard to face, there is no way to reverse these effects and go back or even entirely stop the changes that have become to take shape. We will be facing more extreme unpredictable weather conditions, forest fires, loss of inhabitable land and fertile soil. These changes are inevitably accompanied by mass migration and political tensions. While many impacts of the climate and biodiversity crises are now locked in, their magnitude and distribution can still be affected. How big these changes will be is contingent on collective choices, so *what we do moving forward matters*.

Most sustainability scholars today agree that *change is needed on a fundamental level*. While the great acceleration and the advent of the Anthropocene – the current geological era we are experiencing and that I have briefly just described – gained momentum after the second World War, critical scholars trace the roots of the issues back to the Enlightenment when the ideals of *progress and the assumption of human exceptionalism* gained traction.

Modernity's lock-ins

German sociologist Hartmut Rosa (2013) identifies *social acceleration* – in technological innovation, social change, and the pace of everyday life – as a defining feature of modernity. While acceleration may yield temporary gains, particularly through technological advances, Rosa argues that it ultimately leads

to alienation, undermining our capacity for resonance and meaningful relationships.

David Graeber and David Wengrow (2021) approach the question of modernity from a different angle. Drawing on archaeological and anthropological evidence, they show how *the myth of progress* naturalises increased complexity, inequality and technology, portraying them as inevitable and desirable.

For the contexts of vocational, adult and higher education, Alam et al. (2023) argue that the *scientification* and *fragmentation* of education have aligned it with the techno-industrial logics of modernity. These processes support a division of labour and reinforce social hierarchies. Vocational, adult, and higher education, they argue, often serve to discipline individuals into the *techno-capitalist order*, rather than challenging it.

Although these scholars approach the issue from different vantage points, they all show how *modern systems, values, and assumptions cause us to lose relational depth and mutuality*. Rosa argues that acceleration causes us to lose our capacity for resonant, meaningful relationships with people, nature and time, while Graeber and Wengrow pose that hierarchical systems disrupt more reciprocal forms of being-in-the-world, and Alam et al. argue that the pursuit of technologisation fragments education and enforces social inequality.

The current VET paradigm(s)

These inherent features of modernity are also prevalent in VET. Critical research concludes that, in the current paradigm, VET's purpose is construed as producing skill-for-work. Conveyed through both policy and pedagogical ambitions, this focus is rooted in a *productivist mindset* (Ramsarup et al., 2024). This central belief in industrial growth encourages *narrow institutional priorities*, even when stakeholders are aware of the challenges we are facing (Asaduzzaman et al., 2025). For the Finnish context, Suhonen et al. (2024) found that VET *teachers wanted to engage students in critical global issues, but the system hampered them*. The VET structure's focus on efficiency and individual skills acquisition left little room for deep classroom engagement. In short, the system valued labour-market responsiveness over broader civic or ecological aims.

Status-quo and (weak) reformist responses to sustainability in VET

A recent systematic review of climate and VET literature found that most studies on this topic remain quite *theoretical and reformist* (Poza-Vilches et al., 2025). While studies often emphasise 'green knowledge and skills' or use sustainability jargon, they rarely rethink the whole system. Holistic and/or transformative approaches to the climate emergency are absent in most studies (Poza-Vilches et al., 2025). In practice, this means that many VET institutions simply sprinkle green topics into

existing courses (e.g., adding a module on recycling to a building trades programme) without changing deeper assumptions about growth or livelihoods. Ramsarup et al. (2024) warn that this piecemeal approach risks hindering true integration of sustainability. On a policy level, sustainability agendas in VET have proven contradictory. Despite claiming to promote sustainability, current policies continue to depend on *extractivist, productivist, and consumerist* logics (Alam et al., 2023). These logics rely on the exploitation of both natural resources and people. In the Global North, much of the resulting environmental and social harm is obscured because costs are displaced to the Global South. However, the *devaluation of care and repair work* is also felt in our own communities.

In short, sustainability research indicates that VET's default mode remains - produce workers for the economy, with only superficial nods to sustainability. This framing *leaves little space for learners' broader development or for questioning growth itself* (Schmelzer et al., 2022; Suhonen et al., 2024). Which begs the question: If VET were redesigned with a focus on people and planet, what would change?

Alternative pathways in VET

Despite the prevalence of a productivist mindset in VET, there is some research on alternative priorities and responses.

Studying agricultural vocational schools in Zimbabwe, Muwaniki et al. (2024) found that, in the face of both climate and economic collapse, VET should focus on how best to *serve learners and the community* rather than on supplying labour (here) to big farms or industries. Based on an empirical study of Australian gasfitters as example, Sandri et al. (2024) argue that upskilling strategies require *an explicit re-problematization* of ends as well as means; otherwise, 'green' content is absorbed into business-as-usual trajectories. Drawing on multi-country research, Lotz-Sisitka et al. (2024) show that system change in VET depends on re-valuing purposes, not only re-tooling curricula. The authors argue that VET transformation *cannot ignore deep power and environmental questions*; a curriculum overhaul might need to address who controls resources or whose knowledge counts. A VET programme on oil refining in South Africa cannot ignore local environmental justice issues or the global oil economy. A VET programme in Swedish municipal adult education that trains workers for the electrical car battery industry, cannot ignore local social justice issues such as Sápmi land rights or global environmental justice issues pertaining to the extraction of precious metals both locally and abroad.

Alam et al. (2023) argue that education should foster *modesty, humility, and care* - not progress, control, or competition - and promote *simpler, locally embedded ways of life*. It should move away from preparing people to serve industrial systems and instead help cultivate *ecologically embedded and politically conscious*

citizens. When industrial values and metrics are naturalised or assumed to be neutral, instrumental rationality overshadows ethical and ecological considerations. This is of course not new. Thinkers like Arendt (1958) and Horkheimer and Adorno (1947/2002) have highlighted how technology not only transforms environments but also undermines political action, alienates humans, and can reproduce authoritarian tendencies.

In my own research I show that the *organisational tools* that we use do more than manage or facilitate practice. They also enact implicit values, distribute power and responsibility, thus *shaping reality* (Holmqvist, 2022, 2024).

In summary, research clearly shows that *alternative futures require change on a systemic level*: Our visions of what constitutes success, and a 'good life' must change. For this to be possible, we must re-learn some important truths about the physical world. Truths that our progress through modern times has made us forget. One such important lessons is that *resources are finite*. Another is that *progress as growth* is not the only way to conceptualise success.

Alternative conventions of worth²

So, if a growth paradigm is no longer viable and industrial-market values must be replaced, what values and priorities might replace them? I want to suggest three alternative grounding conventions of worth or value regimes for a post-growth VET.³

Civic worth (Community and care). What if we were to value *repair, reciprocity, and democratic engagement*? A vocational system guided by civic worth would prioritise community benefit and social solidarity over economic growth. It might teach repair of communal goods and mutual aid; cooperative learning or involve students in local governance projects. It might honour labour that cares for others (from social work to neighbourhood farming); and value that trainees volunteer in a community clinic or that an apprenticeship includes mentoring by retirees to pass on cultural skills. In other words, VET would teach that making life better for people and communities is just as 'valuable' as making widgets.

Eco-centric worth (Ecological embeddedness). What if we were to value *the Earth system's integrity*, including the biosphere and the health of the ecological systems that it encompasses? A vocational system guided by eco-centric values would prioritise sufficiency over efficiency, support and protect Life; and promote earth-care labour as the most crucial mission for all. It might ask: how does this education respect the Earth system's boundaries and the finite nature of resources (both material and temporal)? It might teach trainees to see themselves as part of ecosystems, not apart from them; how to maintain and repair tools and artefacts for longevity, how to reuse parts, and design closed loop systems.

Dialectical worth (Complexity and reflection). What if we were to value *critique, diversity and plurality*? A VET system based in dialectical worth would allow and encourage ambivalence, ethical reasoning, and critical thinking. It might teach in ways that invite openness and humility, allowing learners to voice and pursue hard questions that lack simple or clear answers, empowering them to navigate trade-offs and reflect on impact. It might teach the importance of re-imagining work and society and how to do that in generative, critically different ways. It might include reflective discussion on power and justice, even when this is not economically 'efficient'.

What might this look like in practice? Structurally, funding and governance could be re-specified so that schools publicly justify civic and ecological ends – not by adding new metrics, but by making reasons and practices visible. Partnerships might expand beyond industry to include non-profits, cooperatives, and local governments, spreading influence beyond the corporate sphere. Curricula could include *repair and reuse skills, collaborative problem-solving* with real stakeholders, *resilience training, and civic deliberation*. Some examples and seeds of change already exist. Weijzen et al. (2024) describe collaborative learning arrangements where students and community actors jointly tackle real sustainability challenges, helping to bridge the theory-practice gap. This sort of approach opens up space for transformative learning, letting trainees ask existential questions like: *What am I really here to do?*

Part II: How can teachers support such transformations?

Having rethought *what* VET might value, let's talk about *how* it might be taught – and *where*. If we recognise that modernity and the pursuit of economic growth cause alienation and prevent us from engaging meaningfully with ourselves, others and the world around us, I would argue that education has to focus on carving space for learners to *connect* in deep and meaningful ways with themselves, others, and the world around them. It's not enough to add a sustainability module here or there; we must embed these values in pedagogy and learning environments so that sustainability is *lived* and *felt*.

Carving space as pedagogy

In our research, we have developed the idea that teachers can 'carve space' for learning (Holmqvist & Millenberg, 2024). It is about planning for and teaching in ways that give participants the opportunity to explore, reflect, be challenged and change. Such a space is not a physical place, but an educational and existential space where new thoughts and perspectives can take root. Three dimensions are particularly important when carving such spaces: time, place, and relationships. We believe that teaching for sustainability needs to relate consciously to all three.

Time and pace

Learning for sustainability requires time to think, to converse, to feel and to reconsider. Teaching needs to provide room for reflection and to act consciously – both during planning and in the classroom. Therefore, it is important to deliberately slow down. Slowing down doesn't mean working inefficiently, but rather consciously creating space for deeper learning processes – allowing students to really think, discuss and digest their impressions, instead of rushing on (Berg & Seeber, 2016). The aim is not to always be slow, but to adapt the pace to the content and goals – it is conscious presence in time that is key. In practice, it can be about letting silence have space, working on longer projects, or letting the participants work on issues that evoke emotions and require time to process. Such a rhythm can also help to highlight and challenge the time perspectives that characterise our time – where quick rewards are often prioritised over long-term responsibility.

Places as inherently pedagogical

Places today, in our digital and highly mobile world, can easily be seen as backdrops for our lives and actions. Canadian outdoor education researcher David Gruenewald believes that places are educational in nature, rather than neutral backdrops for learning. He and other researchers with him describe it as us shaping places and that places in turn shape us. Crucially, places 'teach us about how the world works and how our lives fit into the spaces we occupy' (Gruenewald, 2003, p. 621). As illustrated by figure 1 below, what is learned in such cases depends on *the types of places* people experience and *the quality of attention* they give them (Butler et al., 2018; Gruenewald, 2003; Lange, 2023). From this perspective, the role of teaching is to carve spaces where learners can become aware of and listen to what places teach us about being in the world, as well as to want to intervene in and reshape unsustainable places based on notions of radically different futures (Gruenewald, 2003).

Anchoring teaching in places can mean starting from the participants' own experiences and everyday environments, working with the history, ecology and future of places, or letting the teaching take place outdoors or in the local community. By letting the learning take its starting point in one's own surroundings, the content becomes more alive. Central here is to develop a critical sense of place – to be able to read and question the power relations and values that are embedded in our surroundings. For example, one can discuss what a modern farming complex looks like today, why it was designed that way and how it could be designed differently to be greener or fairer. Through such exercises, learning is linked both to place and to a larger context, which makes the concept of sustainability more tangible and meaningful.



Figure 1. What type of places people experience matters. Compare, for example, what students might learn from visiting a monoculture forest where industrial agents use large machines for clearcutting, with a biodiverse forest, where foresters use nature-based forestry techniques to harvest materials.

Relationships and relationality

Learning is both relational and embodied. We engage with the world around us and others through our bodies. For biologist and philosopher Andreas Weber (2016), morality begins in ‘the feeling body’ – it is through our bodies that we sense, value and respond to the world. Similarly, John Dewey (1934/1980) argues that emotions play an important role in rational thinking. This means that education needs to engage more than just learners’ cognition.

Here, VET has a potential advantage over other educational contexts. Research on ‘embodied learning’ in VET suggests that *the psychomotor, manual aspects of vocational training are pedagogically rich*: they integrate mind and body, and they ground abstract concepts in real experience (Hyland, 2018; Mulcahy, 2000). When students *do things* – repair a machine, harvest a crop, care for an elderly person – they can experience the limitations and possibilities of those systems. In short, the *materiality and embodiment* of VET – which are already strengths of this system – can be repurposed as *powerful points of entry* to learning for sustainability. They can be leveraged also towards teaching civic deliberation and carving space for students to experience ways of being-in-the-world that are not yet available outside the educational context. By situating learning in bodies, tools and places, such pedagogies can convey the material interdependence and biophysical limits that frame our existence and foreground the generative potential of alternative values (e.g., civic, eco-centric, and dialectical).

Lastly, relationality also refers to *the dialectical relationship between the individual’s lifeworld and broader social patterns*. Critical theorist Oskar Negt argues that individual experience cannot be properly understood unless it is seen in

relation to broader social issues. According to Negt, emancipatory education should start from people's personal everyday experiences and help them understand structural issues. Negt (1971) developed his own pedagogy of *exemplary learning*, producing and organising multiple instructional materials that addressed workers' interests and class consciousness to support workers in taking emancipatory action. Contemporary discussions of sustainability and 'transformative learning' often neglect this dialectical relation between experience and the social imagination, leading to conclusions, strategies and proposals built on shallow foundations.

Hope and radical imagination

Waking up to the implications of our unsustainable present and learning for change is demanding. As scholars have argued for decades now, cultivating collective action and radical hope – that is, hope that recognises agency without discounting limits or power – requires community and shared, safe-enough spaces (cf. Gruenewald, 2003; hooks, 2003, Singer-Brodowski et al., 2022). The act of sharing and being vulnerable together can open space to 'sit with the trouble' and practice *conviviality* or an ethic of care (Martinsson & Mulinari, 2023), as well as the type of *dialogue* which is central to critical adult education. From a psychological perspective, *compassion* and *self-compassion* help us feel connected to ourselves and others (Neff, 2011), while *empathy*, pedagogically and politically, invites us to stand with others and make the dismantling of oppression a common cause (Nicholls, 2011).

Scholars of adult learning show that the ability to *imagine futures* is crucial for both sustainability (Lange, 2023) and democracy (Rasmussen, 2021). However, radical imagination *requires practice* (Jickling & Blenkinsop, 2021). *Artistic expression* is a particularly powerful way to invite and practise creativity, not least when developing social consciousness and imagining social change (cf. Ammentorp, 2007; von Kotze, 2019).

In our own research, we asked learners to 'dream on top of place' (see figure 2), acknowledging places' socially constructed nature and inherent malleability, without denying their biophysical properties. In this we found that '*intervening in places and reimagining them [...] invites hope and a willingness to change that can expand our capacity to think radically about different futures*' (Holmqvist & Millenberg, 2024, p. 309, my emphasis).

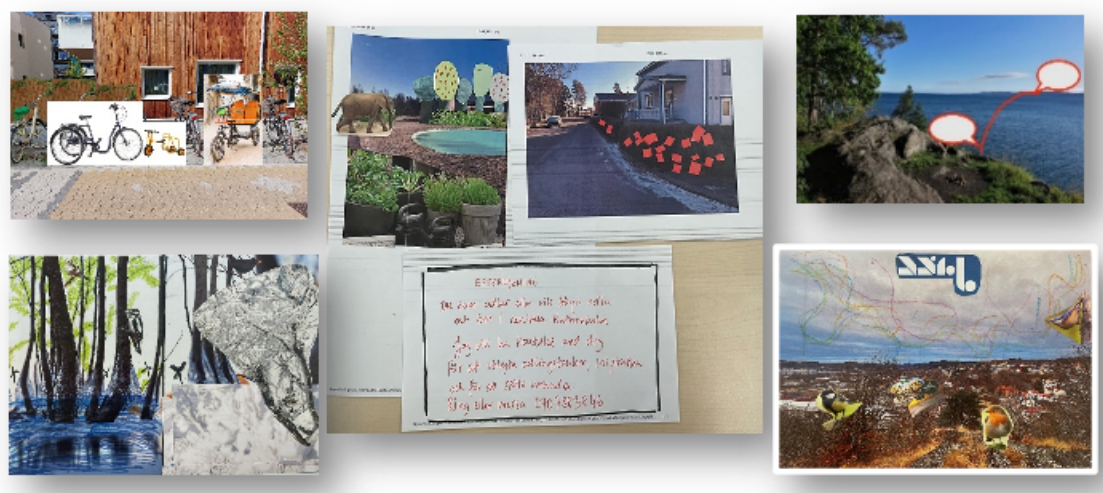


Figure 2. Examples of place-anchored future imaginings of five project participants.

Part III: So what?

So far, I have focused on the system level and on teaching. But what can *we* as researchers and academics do to carve space for sustainable futures?

Academic responsibility and opportunity structures

We should *revisit curricula and outcomes* to embed learning for sustainability throughout VET. As researchers, this could mean looking at education for sustainability through a holistic, values-based lens, rather than focusing on single teaching practices or course modules. In other words, approaching sustainability as a stance or a commitment woven throughout the fabric of the VET rather than as occasional specific measures. Alternatively, when making policy and curriculum recommendations based on our research, we should take such aspects into consideration, as well as point policymakers in the right direction when it comes to what counts as successful outcomes and how these could be measured.

We should *support experiential, embodied, and critical place-anchored pedagogies*. As researchers and VET teacher educators, we can help VET teachers see how they can leverage the potentialities inherent in VET to support students learning for sustainability in powerful ways. Engaging in collaborative research together with VET teachers can be part of such work.

We should *broaden stakeholder involvement* and include non-traditional partners in VET. As researchers we can consider carefully which stakeholders we collaborate with, partnering for example with NGOs and other non-traditional partners to bolster their role in curriculum development, work placements etc.

We should *address labour market structures* by recognising that if ‘qualified labour’ is oversupplied in some fields but direly needed in green sectors, VET has a role in balancing that. As researchers, we could focus on liminal spaces and marginal practices that seek to be truly innovative to interrogate and learn from them and help scale up their potential.

We should *embrace and support informal learning*, since much vocational education happens outside schools or formal institutions. As researchers, we could consider which VET contexts and practices we chose to focus and contribute knowledge on.

In closing...

I recognise this is a lot, and change is hard. But change is happening whether we like it or not. By being intentional, by carving spaces of possibility, we can be agents in that change. As critical scholars tend to argue, *true freedom* involves not just choice within a system but the capacity to *reconfigure the system itself*. While *modernity suppresses such freedom*, we still have the responsibility to seek ways to move beyond our current systems. Looking at a substantial body of examples from beyond modernity, Graeber and Wengrow demonstrate that people have always experimented with different social orders, which challenges the idea of progress as linear and invites *political imagination* that transgresses the paradigm of modernity.

Transforming VET requires systemic change, but sustainable futures won’t be achieved through one grand plan. They require that many people *redefine what they care about and how they act*.

This is not a call for a one-size-fits-all solution. It is an invitation to us all, collectively and individually, to *reflect and act*. *How might our work, right here and now, carve space for the futures we value?* And what might happen, if VET were to shift its compass from growth to life – from *employability* to *liveability*?

Endnotes

¹ This manuscript is based on a keynote presented at the NordYrk (Nordic research network on vocational education and training) conference held in Aarhus, Denmark, 10–12 June 2025. Some parts have been revised or expanded for clarity.

² Following Boltanski and Thévenot (2006), I use ‘conventions of worth’ to mean publicly recognisable regimes of coordination or shared logics of ascribing value to people, objects, and practices according to differing conceptions of justice and the common good. These are sometimes also referred to as ‘value regimes’ or ‘moral regimes’.

³ Following Hopkins (2019), I adopt a ‘what if’ framing when discussing potential futures. This approach invites pathways thinking rather than prediction. Unlike declarative statements, open-ended inquiry resists prematurely collapsing possibility into linear conceptions such as ‘one roadmap’, ‘one best possible future’ or ‘there is no

alternative'. This further aligns with my conventions of worth approach, in which value is established through coordination, contestation and public deliberation rather than fixed or predetermined.

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