Bundesinstitut für Berufsbildung BIBB

Forschen
Beraten
Zukunft gestalten

Forschungsprojekt **1.5.203** (JFP 2007)

Credit-Systeme für das lebenslange Lernen, CS3L

Abschlussbericht

Dr. Christiane Eberhardt, 1.1
Dr. Silvia Annen, 4.2
Franziska Kupfer, 3.2
Christiane Köhlmann-Eckel, 3.4
Karin Schwichtenberg, 1.1

Laufzeit 2009-2012

Bundesinstitut für Berufsbildung
Robert-Schuman-Platz 3
53175 Bonn

Telefon: 0228 / 107 - 0
Fax: 0228 / 107 - 2986
E-Mail: eberhardt@bibb.de

www.bibb.de

Bonn, Dezember 2013

Inhaltsverzeichnis

Das Wichtigste in Kürze **2**

1 Problemdarstellung **3**

2 Projektziele, Forschungsfragen und Hypothesen/ forschungsleitende Annahmen **3**

3 Methodische Vorgehensweise **4**

4 Ergebnisse **7**

5. Zielerreichung **12**

6 Ausblick und Transfer **14**

Veröffentlichungen **15**

Das Wichtigste in Kürze

Untersuchungen der OECD stufen Credit-Systeme als äußerst effektive Instrumente zur Förderung des lebenslangen Lernens ein (OECD 2007). Ihnen wird die Funktion zugeschrieben, Transparenz, Vergleichbarkeit, Transferierbarkeit und wechselseitige Anerkennung von nachgewiesenen Lernleistungen zu ermöglichen und zu einer verbesserten Durchlässigkeit beizutragen. Gegenwärtig werden in Europa mit dem Begriff „Credit-System" ausschließlich die Instrumente ECTS (für die Hochschulen) und ECVET (für die Berufsbildung) verbunden. Es ist auffällig, dass in den europäischen Initiativen zur Einführung von Credit-Systemen die Gestaltungsprinzipien wie die Vergabe von Credits (oft übersetzt mit „Leistungspunkten") sowie Akkumulation und Transfer von zertifizierten Lernergebnissen auf der Grundlage von modular strukturierten Qualifikationseinheiten im Vordergrund stehen. Der Kern von Credit-Systemen liegt insofern darin, Zu- und Übergänge zwischen verschiedenen Lernkontexten zu erleichtern und Bildungszeiten zu verkürzen.

Es ist zu fragen, ob in den Systemen ausgewählter Länder bereits Modelle existieren, die ebenfalls darauf ausgerichtet sind, Transparenz, Vergleichbarkeit und Anerkennung durch Anrechnungsverfahren zu gewährleisten und die sich ggf. auf andere Gestaltungsprinzipien gründen. In Dänemark, den Niederlanden, Deutschland und Schottland lassen sich entsprechende Beispiele finden, die implementiert sind bzw. gegenwärtig diskutiert werden. Sie reichen von Portfolio-Verfahren über gesetzlich regulierte Ansprüche auf Anrechnungsprozeduren bis zu fest im Bildungssystem verankerten Anrechnungsmechanismen zwischen den einzelnen Lernkontexten.

Das im Forschungsprojekt zugrunde gelegte Verständnis von „Credit-System" ist nicht mit einem Leistungspunktesystem gleichzusetzen, da - mit Ausnahme von Schottland - die Verfahren in den betreffenden Ländern ohne die Vergabe von Credits/Leistungspunkten praktiziert werden. Obwohl in allen untersuchten Ländern ein institutioneller oder gesetzlicher Rahmen existiert, der die Anrechnung von Lernleistungen ermöglicht, ist jedoch das Wissen über die konkrete Anwendung und Durchführung, die de-facto-Nutzung und die Wirkung dieser Verfahren und Modelle unzureichend. Darüber hinaus ist zu fragen, ob die implementierten Verfahren als ein die verschiedenen Lernkontexte des Bildungssystems übergreifendes „System" verstanden werden können, das in der Lage ist, lebenslanges Lernen und Durchlässigkeit zu fördern. Zusammenfassend lässt sich festhalten, dass

- in Dänemark und in den Niederlanden die Anrechnung von Lernleistungen von einem Kontext in einen anderen mehrheitlich nach Prinzipien der „recognition of prior learning" erfolgt
- die Anrechnung in allen Ländern mehrheitlich eine Einzelfallbetrachtung voraussetzt und mit keinem Automatismus verbunden ist
- in allen untersuchten Ländern die aufnehmende Stelle entscheidet, ob eine Anrechnung erfolgt und
- die praktizierten Verfahren sich in keinem der untersuchten Ländern explizit auf das europäische Leistungspunktesystem ECVET beziehen

1 Problemdarstellung

Die Autorinnen und Autoren des Datenreports zum Berufsbildungsbericht 2011 verweisen darauf, dass Durchlässigkeit eine „drängende Zukunftsaufgabe“ ist, die nur erreicht werden kann, wenn das Bildungssystem insgesamt transparente und durchlässige Entwicklungspfade bietet, d.h. wenn in *„jeder Bildungsphase (…) alle weiteren Bildungswege und -abschlüsse prinzipiell offen (sind) und erreichbar bleiben*“ (DATENREPORT ZUM BERUFSBILDUNGSBERICHT 2011, S. 379).

Dem Handlungsfeld „Anrechnung“ wird eine wichtige Rolle eingeräumt, wenn es darum geht, Zu- und Übergänge zwischen den Säulen des deutschen Bildungssystems sowie im Berufsbildungssystem selbst, zu erleichtern. Doch nicht nur im deutschen Kontext wird die Herstellung von Anrechnungs- und Anerkennungsmechanismen befördert, sie wird auch auf der europäischen Agenda mit Verve vorangetrieben. Sie wird gemeinhin unter den Begriff „Credit-System“ subsumiert und ist elementar im Bologna- sowie im Kopenhagen-Prozess verankert. Für die Hochschulen liegt mit ECTS ein Credit-System vor, das mittlerweile in den hochschulischen Gesetzgebungen fast aller Mitgliedstaaten des Bologna-Prozesses verankert ist (EUROPÄISCHE KOMMISSION 2006). Seit 2002 wird auf europäischer Ebene darüber hinaus an einem ECTS-kompatiblen Credit-System gearbeitet, das insbesondere für die die Aus- und Weiterbildung sowie zum Nachweis von außerhalb des Bildungssystems erworbenen individuellen Lernergebnissen eingesetzt werden soll, dem ECVET (European Credit System for Vocational Education and Training). Unterstellt wird in allen Fällen, dass Credit-Systeme Transparenz, Vergleichbarkeit, Transferierbarkeit und wechselseitige Anerkennung von nachgewiesenen Qualifikationen innerhalb und/oder zwischen Bildungssystemen ermöglichen und damit zu einer verbesserten Durchlässigkeit beitragen (LE MOUILLOUR / JONES / SELLIN 2003, LE MOUILLOUR 2006).

Beide Instrumente stehen für Konstrukte, die mit einem speziellen Konzept (Strukturierung von Qualifikationen durch Einheiten) und einem konkreten Anwendungskontext (Akkumulation von Units zu einer Gesamtqualifikation) verbunden sind.

2 Projektziele, Forschungsfragen und Hypothesen/ forschungsleitende Annahmen

ECVET liegt in seinen Grundprinzipien in Form einer Empfehlung des Europäischen Rats und des Parlaments vor (Europäische Kommission 2008). Mit Ausnahme von Malta ist ECVET noch in keinem Mitgliedstaat als System implementiert, das eine wechselseitige Anerkennung von nachgewiesenen Qualifikationen innerhalb und/oder zwischen Bildungssystemen ermöglichen könnte.

Im Projekt CS3L haben wir uns daher von einer einseitigen Ausrichtung auf ECVET gelöst. Sinnvoller schien es, den Forschungsgegenstand zu öffnen und zu untersuchen, ob und wenn ja, wie, in ausgewählten Mitgliedstaaten Anrechnungsmodelle und -verfahren eingeführt oder in Planung sind. Im Mittelpunkt des Projektes stehen die Beispiele und Ansätze aus Schottland, den Niederlanden, Dänemark und Deutschland.

Das Projekt CS3L hatte sich in einem ersten Schritt zum Ziel gesetzt, zu ermitteln, welche Verfahren, Modelle und ggf. Systeme in den betreffenden Ländern zur Beschreibung, Dokumentation und zur Anrechnung von Lernergebnissen eingesetzt werden. In einem weiteren Schritt sollte erfasst werden, wie diese Verfahren genutzt und welche Wirkungen an ausgewählten Schnittstellen damit erzielt werden.

Im Forschungsfokus stand

- ❖ die Identifizierung und Einordnung der in den betreffenden Ländern eingesetzten Verfahren und Systeme von Anrechnung (Bestandsaufnahme);
- ❖ die methodisch-konzeptionellen Grundlagen, die institutionellen Rahmenbedingungen und die de-facto-Nutzung von Credit-Transfer (Systematisierung).

Operationalisiert wurden die o.g. Aspekte durch folgende Fragen:

- Welche Formen von Anrechnung und Anerkennung (Credit-Systeme) existieren in den Ländern? Was ist der Gegenstand von Anrechnung (Lernergebnisse, Teilqualifikationen, berufliche Handlungskompetenz)?
- Auf welcher methodisch-konzeptionellen Grundlage und aus welcher Perspektive findet Anrechnung statt (Lernerzentrierung oder Systemzentrierung)?
- In welche institutionellen Rahmenbedingungen ist Anrechnung eingebettet und von welcher gesetzlichen Basis ist sie ableitbar?
- Wie wird sie in der Praxis umgesetzt? Wie ist die Nutzung und Nachfrage nach Anrechnung?

Das Forschungsprojekt zielte im Anschluss an die Bestandsaufnahme und Systematisierung darauf ab, aus einer vergleichenden Perspektive heraus Möglichkeiten, Optionen und/oder Regelungsbedarfe aufzuzeigen, die sich in den betreffenden Ländern bei einer etwaigen Nutzung des europäischen ECVET-Instrumentes ergeben.

3 Methodische Vorgehensweise

Vor dem Hintergrund der Forschungsfragen wurde das Projekt „Credit-Systeme für das lebenslange Lernen“ als explorative Studie durchgeführt, die darauf ausgerichtet war, Einflussfaktoren, Vermittlungsprozesse und Wirkungsmechanismen für und von Credit-Systemen in den beteiligten Ländern zu rekonstruieren, d.h. die Kausalmechanismen in Handlungssystemen und Akteurskonstellationen aufzuzeigen. Gefragt wurde nach der Ursache für bestimmte Phänomene (den institutionellen Rahmenbedingungen und der Verfasstheit der Bildungssysteme) und andererseits nach dem sozialen Prozess, in dem der Mechanismus operiert (den Antriebskräften und den methodisch-konzeptionellen Grundlagen). Es handelte sich um einen qualitativen Ansatz. Dokumente und Daten der betreffenden Länder und europäischer Provenienz wurden unter Verwendung hermeneutischer Verfahren ausgewertet und analysiert. In einem weiteren Schritt wurden Experteninterviews durchgeführt, da die zu erforschenden sozialen Mechanismen in der Regel nur mit qualitativen Methoden identifizierbar sind.
Der Forschungsansatz wurde aufgrund des Forschungsgegenstands und der Datenlage gewählt.

Das Projekt wurde mit Partnern aus Schottland (Universität Edinburgh), Dänemark (Metropol) und den Niederlanden (Cofora) durchgeführt.[1] Für den deutschen Teil der Studie war das BIBB federführend. Die Herstellung eines gemeinsamen Verständnisses über den Forschungsgegenstand und die Adaption des Forschungsdesigns an die spezifischen Bedingungen in vier Ländern machte eine enge

[1] Zu Beginn des Projektes war beabsichtigt, Frankreich als weiteres Land in die Untersuchung einzubinden. An der Ausschreibung des Auftrags haben sich jedoch keine Partner aus Frankreich beteiligt. Dier Niederlande haben sich lediglich für eine Vorstudie am Projekt beteiligt.

Kooperation mit den Auftragnehmern in den betreffenden Ländern notwendig. In zwei Projektgruppensitzungen (nach Forschungsphase 1 und nach Forschungsphase 2) wurden sowohl die ersten Ergebnisse als auch die weiteren Projektschritte gemeinsam reflektiert und eingeschätzt. Die Sitzungen dienten darüber hinaus der Herstellung eines gemeinsamen Begriffsverständnisses, das in allen vier Kontexten operationalisierbar war. CS3L gliederte sich insgesamt in drei Forschungsphasen, die in enger Abstimmung mit den europäischen Auftragnehmern durchgeführt wurden.

Forschungsphase 1 *(Informationssammlung, Erstellung von Hintergrundberichten, Formulierung weiterführender Forschungsfragen und erster Hypothesen, Entwicklung des Erhebungsinstruments und erster Entwurf des Auswertungsrasters):*
Die Phase der Dokumenten- und Datenanalyse wurde von einer ersten Annäherung an die genannten Forschungsfragen zu den methodisch-konzeptionellen Grundlagen und den institutionellen Rahmenbedingungen von Credit-Systemen bzw. Anrechnungsverfahren an den definierten Schnittstellen „Zugang“ und „Übergang“ in den Qualifikationssystemen der beteiligten Ländern geprägt.

Zur Umsetzung der Forschungsphase: Im Ergebnis der ersten Forschungsphase wurden vier Hintergrundberichte (Backgroundreports) erstellt, die die Diskussion um Anrechnung bzw. Credit-Systeme in den Ländern reflektieren und einen ersten Überblick über eingesetzte Verfahren geben. Sie wurden unter http://www.bibb.de/de/wlk51057.htm zur Verfügung gestellt. Alle Berichte wurden folgen einer vorab vereinbarten Gliederung und nehmen Bezug auf folgenden Punkte:

1. Hintergrund: Das (Berufs)Bildungssystem
   1.1 Kurzer Überblick
   1.2 Steuerungsmechanismen
   1.3 Das System an den Schnittstellen „Zugang“ und „Übergänge“
   1.4 Existierende Verfahren von Anrechnung an den Schnittstellen
   1.5 Aktuelle Herausforderungen
2. Anrechnung und Anerkennung
   2.1 Antriebskräfte
   2.2 in Planung bzw. in Erprobung befindliche Verfahren (Fallbeispiele)
3. Methodologisch-konzeptionelle Grundlagen
   3.1 Gegenstand von Anrechnung: Zeiten, Lernergebnisse, Zeugnisse?
   3.2 Lernergebnisorientierung und Units
   3.2 Nationaler Qualifikationsrahmen
4. Institutionelle Rahmenbedingungen
   4.1 Koordinationsmechanismen
   4.2 gesetzliche Grundlagen
   4.2 Akteure und Zuständigkeiten
5. Nutzen und Nachfrage
6. Stellenwert der europäischen Initiativen (ECVET, EQF)

Forschungsphase 1 erwies sich als grundlegend für die Konzeption eines geeigneten Erhebungsinstruments (Interviewleitfaden) sowie für einen ersten Entwurf des Auswertungsrasters.

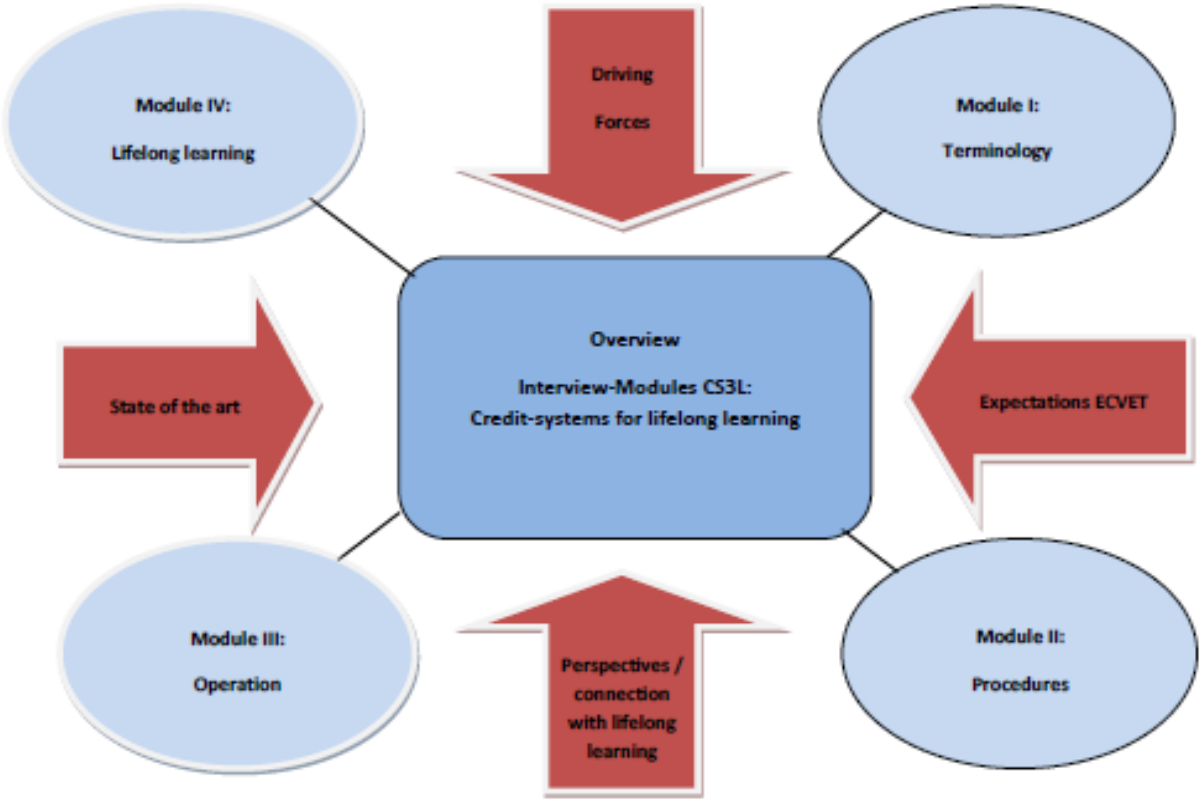
Forschungsphase 2 *(Durchführung von Experteninterviews zur Überprüfung der Forschungshypothesen und zur Erfassung von Expertenwissen):*
In den beteiligten Ländern wurden Interviews mit Experten aus Politik, Praxis und Forschung durchgeführt, die einschlägig mit dem Thema befasst sind. Pro Land waren ca. 10 Interviews pro Schnittstelle geplant. Die Interviews zielten durch die Ermittlung von (impliziten und expliziten) Expertenwissen darauf ab, die in Forschungsphase 1 formulierten Zwischenergebnisse und Forschungshypothesen kritisch zu überprüfen, ggf. zu modifizieren und zu schärfen. Weit deutlicher als in Phase 1 spielten bei den Interviews Fragen nach der tatsächlichen Nutzung vorhandener Anrechnungsverfahren und Credit-Systeme sowie nach deren Wirksamkeit an den definierten Schnittstellen eine Rolle.

Zur Umsetzung der Forschungsphase:
Aufgrund der Hintergrundberichte wurde deutlich, wie weit sich Verständnis, Anwendungskontexte, Schnittstellen und Verfahren von Anrechnung in den betreffen Ländern unterscheiden. Dies hatte auf die Durchführung der Interviews insofern Auswirkungen, als dass die Forschungsgruppe sich zunächst auf eine gemeinsame Definition von „Credit-System" verständigt hat. Die von CEDEFOP zugrunde gelegte Definition, in der „Credit-Systeme" als Instrumente und Verfahren beschrieben werden, die „*dazu geeignet sind, Lernergebnisse zu akkumulieren und ihren Transfer von einem Lernkontext zu einem anderen mit dem Ziel der Anrechnung und Anerkennung zu erleichtern*" (CEDEFOP 2008) wurde wie folgt auf den CS3L-Kontext adaptiert: Unter dem Begriff „**Credit-Systeme" werden Modelle und Verfahren von Anrechnung verstanden, die darauf ausgerichtet sind, Zu- und Übergänge im Bildungssystem zu erleichtern und/oder (Aus)Bildungszeiten zu verkürzen**. Diese Arbeitsdefinition wurde mit allen Interviewpartnern in den vier Ländern diskutiert und im Hinblick auf die nationalen Verfahren reflektiert. In dieser Forschungsphase zeigte sich deutlich, dass - anders als im Ursprungsantrag vermutet - manche Aspekte (wie z.B. aktuelle Entwicklungen und Perspektiven von ECVET) oder Schnittstellen (wie z.B. der Übergang zur Hochschule) in einigen Ländern weniger Relevanz als in anderen haben und stattdessen andere Aspekte (wie z.B. die Verbindung von Erwachsenenbildung und Berufsbildung oder die Validierung informellen Lernens) hervorgehoben werden sollten.

Unabhängig von der konkreten Anzahl der Interviewpartner wurde festgelegt, dass insgesamt vier Gruppen von Experten befragt werden:

- Personen, die in ihrer Funktion in diversen Ausschüssen und Gremien zur Gestaltung von Berufsbildungspolitik beitragen
- Personen, die an der Umsetzung und Durchführung von Verfahren und Modellen befasst sind,
- Personen, die potenziell ein Interesse an Anrechnungsverfahren haben könnten und aus der Umsetzungspraxis berichten und
- Experten, die die gegenwärtigen europäischen und nationalen Diskussionen aus einer Forschungsperspektive verfolgen.

Die Interviewleitfäden wurden von den Länderteams eigenständig und zugeschnitten auf die nationalen Spezifika entwickelt. Im Vorfeld erfolgte jedoch die Verständigung über „Interviewmodule", die in den Gesprächen mit den Experten thematisiert werden sollten.



Forschungsphase 3 *(Auswertung und Systematisierung des vorliegenden Materials):*

Das Projekt CS3L verfolgte einen explorierenden, auf Forschungsfragen basierenden, Ansatz. Die erste Forschungsphase (Informationssammlung, Hintergrundberichte) war darauf ausgerichtet, die Forschungsfragen zu schärfen. Die aus den Länderberichten generierten ersten Befunde wurden in Forschungsphase 2 und 3 überprüft und systematisiert: Die Zusammenführung der Ergebnisse aus den Forschungsphasen 1 und 2 führte zur Identifizierung, Systematisierung und Einordnung der in den Ländern eingesetzten Verfahren von Anrechnung und Anerkennung.

4 Ergebnisse

Basierend auf den nationalen Hintergrundberichten und den Auswertungen der in den Ländern durchgeführten Interviews lassen sich folgende Ergebnisse formulieren:

4.1 Welche Formen von Anrechnung und Anerkennung (Credit-Systeme) existieren in den Ländern?

In allen untersuchten Ländern findet faktisch Anrechnung von früherem Lernen statt. Die Verfahren unterscheiden sich sowohl hinsichtlich des Gegenstandes von Anrechnung (Lernergebnisse, Kompetenzen allgemein, Beruflichkeit, Schlüsselqualifikationen, Ausbildungszeiten etc.), als auch hinsichtlich des Ausgangspunktes von Anrechnung (das Individuum, das System, der Arbeitsmarkt, das Beschäftigungssystem). Während in Deutschland und Dänemark Anrechnungsprozeduren vorrangig auf den Arbeitsmarkt ausgerichtet sind, fokussieren die in Schottland und den Niederlanden praktizierten Modelle stärker auf das Bildungssystem selbst und den Übergang zur Hochschulbildung.

Alle in den Ländern identifizierten Modelle und Verfahren von Anrechnung sind auf mindestens einen der nachfolgenden Zielkorridore ausgerichtet:

a. „Zugang“ bzw. „Zulassung“ (zu einem Bildungsgang, zu einer Prüfung etc.)
b. Befreiung (z.B. zu Prüfungen oder der Absolvierung bestimmter Lernergebniseinheiten/Module) oder
c. Verkürzung (von Ausbildungszeiten).

Es scheint, als seien die Punkte a und b weitaus häufiger Ziel von Verfahren als Punkt c. Dies ist auch für Schottland der Fall, wo Anrechnung nur in seltenen Fällen zu einer Verkürzung von Ausbildungszeiten führt.

Während Schottland mit der Orientierung an Lernergebnissen und der Vergabe von Credits eine gewisse Nähe zum europäischen Instrument ECVET aufweist, ist dies bei den in den Niederlanden, Deutschland und Dänemark eingesetzten Verfahren nicht nachzuweisen. Bezogen auf Deutschland ist zu konstatieren, dass sich sowohl die auf der Grundlage des BBiG etablierten Verfahren von Anrechnung, als auch die im Rahmen von Förderinitiativen erprobten Ansätze in einem Spannungsverhältnis zu den europäischen Initiativen zum Credit-Transfer befinden.

4.2 Auf welcher methodisch-konzeptionellen Grundlage und aus welcher Perspektive findet Anrechnung statt (Lernerzentrierung oder Systemzentrierung)?

Anrechnungsmechanismen und –verfahren vollziehen sich vor dem Hintergrund

a. formulierter Reformabsichten (Fachkräftesicherung, Integration bestimmter Zielgruppen, Förderung von Durchlässigkeit usw.) und
b. institutioneller Logiken (RAFFE/HOWIESON 2011 und 2012).

Im deutschen Kontext lassen sich diese Logiken aus den verschiedenen Teilbildungssystemen ableiten. Sie manifestieren sich im europäischen Kontext an der Frage, ob Anrechnung primär mit einem Bezug auf „Bildungswege“ (d.h. innerhalb des Systems) oder „Beruflichkeit“ (d.h. Verwertbarkeit auf dem Arbeitsmarkt) praktiziert wird. Reformabsichten und institutionelle Logik(en) stehen in den untersuchten Ländern in einem unterschiedlich starken Spannungsverhältnis. Die in den Interviews genannten „Driver“ und Antriebskräfte sind hingegen in allen untersuchten Ländern identisch (Fachkräftemangel, Notwendigkeit, die Attraktivität beruflicher Ausbildung zu steigern, Internationalisierung).

Das Spannungsfeld zwischen europäischen Zielvorgaben und nationalen Systembedingungen tritt im deutschen Fall offen zutage, wenn die konstituierenden Elemente deutscher Berufsbildung – „Berufskonzept“ und „Dualität“ – im Mittelpunkt der Betrachtung stehen. Während der Begriff der „Dualität“ die Steuerungsmechanismen beruflicher Bildungsgestaltung in den Blick nimmt, verweist das „Berufskonzept“ auf die zugrundeliegenden Konstruktionsprinzipien und auf die Struktur von Qualifikationen. Dieses Verständnis ist in Schottland gänzlich anders (keine Beruflichkeit, keine klare Trennung zwischen Berufs- und Allgemeinbildung), wo Credits und Module die inneren Konstruktionsmerkmale im schottischen System bilden.

Die europäischen Initiativen, die die Einführung von ECTS und ECVET zum Ziel haben, stellen Gestaltungsprinzipien (d.h. die Vergabe von Credits und die Akkumulation von zertifizierten Lernergebnissen) in den Vordergrund der Betrachtung, die jedoch – mit Ausnahme Schottlands – in keinem der untersuchten Länder in der Berufsbildung Anwendung finden. Dies führt im deutschen Kontext zu einer Reihe von konzeptionellen, rechtlichen und organisatorischen Disparitäten. In Deutschland legen die Interviews nahe, dass weder Anerkennung, noch Akkumulation eine wesentliche Rolle bei der Bewältigung der Schnittstellenproblematik in Deutschland spielen. Die befragten Akteurinnen und Akteure sind mehrheitlich der Auffassung, dass Anrechnung die höhere Relevanz beikommt, wenn es darum geht, Übergänge zwischen Bildungsbereichen zu verbessern.

4.3 In welche institutionellen Rahmenbedingungen ist Anrechnung eingebettet und von welcher gesetzlichen Basis ist sie ableitbar?

In allen an der Studie beteiligten europäischen Ländern sind die gesetzlichen und/oder institutionellen Grundlagen für die Anrechnung von Lernleistungen aus einem Lernkontext auf einen anderen gegeben. Während sich diese in Dänemark und Deutschland vorrangig aus der bestehenden Gesetzgebung ableitet, bildet in Schottland der Nationale Qualification and Credit Framework (SQCF) einen freiwilligen Rahmen, dem vorrangig ein Akkumulationsmechanismus zugrunde liegt.

In Deutschland gibt es kein bildungsbereichsübergreifendes Anrechnungs“system“. Gleiches gilt für Dänemark. Es gibt (gesetzlich) geregelte Verfahren der Anrechnung von Lernleistungen, die in ihren jeweiligen Bezugssystemen (Berufsausbildung, Hochschulbildung, Fortbildung) verankert sind. Obwohl die Verfahren rechtlich geregelt sind, wird nur verhältnismäßig wenig von ihnen Gebrauch gemacht. Damit Anrechnungsmechanismen zwischen den unterschiedlichen Bezugssystemen greifen, ist der Nachweis über die Äquivalenz der Lernleistungen gefordert. Er ist die Grundlage von Vertrauen, das zwischen den Akteuren der verschiedenen Bildungsbereiche hergestellt werden muss. In Deutschland stellen die rechtlichen Regelungen im Berufsbildungsgesetz und in der Handwerksordnung zwar eine Basis für Anrechnung dar, lösen aber die vorhandenen Probleme gegenwärtig nur bedingt. Prinzipiell können alle formal, non-formal und informell erworbenen Kompetenzen, die identifiziert, analysiert, erfasst und an einem Standard gemessen und eingeordnet wurden, angerechnet werden. Dies ist auch die Basis für die Feststellung von Gleichwertigkeit über Kompetenzen, die in unterschiedlichen Teilbildungssystemen oder außerhalb von ihnen erworben wurden. Die Frage nach größerer Durchlässigkeit hängt daher nicht nur von Verfahren ab, sondern davon, dass Vertrauen zwischen den Bildungsbereichen gegeben ist – d. h. zwischen den Akteuren von abgebendem und aufnehmendem System und in die nachgewiesenen Lernleistungen, die angerechnet werden sollen. Nach Einschätzung der deutschen Interviewpartner fehlen jedoch bislang valide Instrumente und Verfahren, wie die bestehenden gesetzlichen Möglichkeiten breiter und effektiver genutzt werden können. Gleichwohl das schottische System ganz anders aufgestellt ist, ergeben sich eine Reihe von Parallelen hinsichtlich des Vertrauens in die im anderen System erworbenen Lernleistungen, der Freiwilligkeit, ob Anrechnung erfolgt und ökonomischen Faktoren, die Anrechnung begünstigen oder behindern. Trotz gänzlich anderer systemischer Voraussetzungen und Verfasstheit wird die Notwendigkeit von Vertrauen schaffenden Maßnahmen zwischen den Teilbildungssystemen von den schottischen Interviewpartnern gleichermaßen hervorgehoben.

4.4 Wie wird Anrechnung in der Praxis umgesetzt? Wie ist ihre Nutzung und Nachfrage?

Anrechnungsverfahren finden in allen untersuchten Ländern nur auf Antrag der beteiligten Personen (desjenigen, dessen Lernleistungen angerechnet werden sollen und desjenigen, der darüber zu entscheiden hat) statt. Anrechnung vollzieht sich daher in hohem Maße flexibel und ist am jeweiligen Bedarf (des Individuums / des Unternehmens / des Arbeitsmarktes) orientiert. Dies lässt den Schluss zu, dass die Frage nach Anrechnung nicht nur vor dem Hintergrund des lebenslangen Lernens, sondern auch der jeweiligen wirtschaftlichen Konjunktur zu beantworten ist.

In allen untersuchten Ländern gibt es nur unzureichende Angaben über die tatsächliche Umsetzung, die de-facto-Nutzung und die Nachfrage nach Anrechnungsverfahren. Dies gilt auch für Schottland, wo – trotz des Qualifikations- und Creditrahmens – der Credit-Transfer von allgemeiner und berufsvorbereitender zu Ausbildung im Rahmen von Colleges und Modern Apprenticeships begrenzt ist. Die schottische Studie hat aufgezeigt, dass es faktisch nur wenig Credit-Transfer zwischen vollzeitschulischen Collegeprogrammen und Modern Apprenticeships und/oder zwischen verschiedenen Modern Apprenticeship Programmen gibt: „*Credit transfer is more common between VET and university, specifically between Higher National qualifications and degrees but even this is still problematic and concentrated in a small number of institutions. Credit transfer from other VET programmes into degrees is very limited and at an early stage of development*." (Background Report Scotland, siehe Anhang). Als Erklärung für die begrenzte Nutzung von Anrechnungsmöglichkeiten wird der Schottische Qualifikationsrahmen herangezogen, der per se flexible Zugänge, Tempi und Durchlässigkeiten ermöglicht – auch ohne offizielle Anrechnungsverfahren. Die Akkumulations-möglichkeiten erweisen sich hierbei weit relevanter als die Anrechnungsmöglichkeiten. Einschränkend führen die Autorinnen und Autoren der schottischen Studie jedoch aus: „But the flexibility and integration of the Scottish system is still limited by three types of barriers: institutional factors, perceptions about different types of learning and political barriers" (Background Report Scotland, siehe Anhang).

4.4 Bezug der untersuchten Anrechnungsmodelle zu den europäischen Initiativen und zu ECVET

In der europäischen Definition sind Credit-Systeme „*dazu geeignet (…) Lernergebnisse zu akkumulieren und ihren Transfer von einem Lernkontext zu einem anderen mit dem Ziel der Anrechnung und Anerkennung zu erleichtern*" (CEDEFOP 2008). Bei keinem der in den untersuchten Ländern identifizierten Modelle und Verfahren ist diese Doppelfunktion von Akkumulation und Transfer gleichermaßen nachzuweisen.

Offen ist darüber hinaus, ob die gesetzlichen und institutionellen Grundlagen in den untersuchten Ländern ausreichend sind, um die mit Credit-Systemen verbundenen Ziele (die in den Ländern durchaus unterschiedlich sein können) zu erreichen oder um das lebenslange Lernen zu fördern. So findet in Schottland z.B. kaum ein Transfer zwischen den Systemen statt, in Deutschland hingegen scheinen die Anrechnungsmöglichkeiten kaum bekannt zu sein. Offensichtlich spielt in allen Ländern die Frage des Vertrauens zwischen den Subsystemen eine wesentliche Rolle.

Für Schottland gilt in diesem Zusammenhang: "*On paper, Scotland has a highly permeable, unified system of lifelong learning underpinned by the Scottish Credit and Qualifications Framework. Recent reports suggest that the reality is less positive. This paper examines credit transfer in Scotland across three interfaces: between general and pre-vocational learning and vocational education and training*

(VET); within VET; and between VET and university degrees. It finds that credit transfer across the first two interfaces is limited; credit transfer at the third interface is more frequent but often problematic. One explanation is that the system is designed around credit accumulation rather than credit transfer; this, together with other features of the Scottish system, means that a degree of permeability is built in without the need for formal credit transfer. But a second explanation highlights the epistemological, institutional and political barriers to a unified system. (…). The capacity of cross-national credit systems to support mobility between national systems should not be exaggerated" (Background Report Scotland, siehe Anhang).

Im Gegensatz dazu wird in Deutschland wird der Anrechnung weit mehr Bedeutung als der Anerkennung beigemessen, wenn die Durchlässigkeit des Systems verbessert werden soll. Die von europäischer Seite entwickelten Instrumente und Initiativen (genannten werden EQR, ECVET, und EQAVET) werden von der Mehrheit der deutschen Interviewpartner als Impulse für die nationalen Entwicklungen bewertet – als besonders positiv wird die Orientierung an Lernergebnissen bzw. die Outcome-Orientierung hervorgehoben. Europäische Initiativen und Zielvorgaben werden als eine Art „sanfter Druck" aus Brüssel empfunden, der national eine erstaunliche Wirkung entfaltet. Der Anstoß der Kommission, Qualitätssicherungsinstrumente transparent zu machen, wird als wichtig eingeschätzt. Grundsätzlich wird der Mehrwert der europäischen Entwicklungen darin gesehen, dass sie die Transparenz der nationalen Bildungsgänge, Qualifikationen und Qualitätssicherungsinstrumente fördern. Bei den Instrumenten der europäischen Bildungspolitik stehe die transnationale Mobilität sowohl im Bildungssystem als auch auf dem Arbeitsmarkt als Ziel im Fokus. Der zentrale Zusammenhang von nationalen und europäischen Initiativen wird in der Betrachtung des Outcomes gesehen. Hier sei eine Neuausrichtung der nationalen Denkweise – ebenfalls stärker an Lernergebnissen ausgerichtet – notwendig. Ebenso wichtig sei, dass die nationalen Aktivitäten mit den europäischen korrespondierten und einen gemeinsamen Rahmen haben. Jedoch wird in den Interviews auch darauf hingewiesen, dass es schwierig sei, beispielsweise ECVET und DECVET miteinander zu koordinieren, da beide Initiativen unterschiedliche Zielsetzungen verfolgten. Während es bei ECVET mehr um die transnationale Mobilität gehe, stehe bei DECVET stärker das Thema Durchlässigkeit im Vordergrund. Insgesamt wird ein Bedarf an passgenauen Anrechnungs- und Anerkennungssystemen gesehen- „und zwar auch erst mal in den Bereichen, wo besonderer Bedarf da ist, und dann später in Bereichen natürlich, wo man erst einen gewissen Bedarf auch rauskitzeln muss. Anders halte ich das auch kaum für umsetzbar" (Herr G, 00:20:16-2). In diesem Zusammenhang wird auf die Vorgaben des BBiG hingewiesen, die den Rahmen für die Implementierung entsprechender Verfahren darstellen.

5. Zielerreichung

Arbeitsschritt 1:

Ziel: Informationssammlung, Anpassung bzw. Schärfung des Forschungsgegenstands an die aktuellen Entwicklungen, Herstellung der Arbeitsgrundlagen (Ausschreibung)

Ergebnis: Leistungsbeschreibung für die Auftragsvergabe liegt vor; Erhebungsraster für die Fallstudien ist erarbeitet; Auftragnehmer für die Länderstudien DK, NL und Schottland sind gefunden

Abschluss der Arbeitsphase 1: Oktober 2009 (um insgesamt 2,5 Monate verzögert, da die Ausschreibung mangels Angeboten zweimal durchgeführt werden musste).

Arbeitsschritt 2:

Ziel: Dokumentenanalyse, Anfertigung von vier Länderstudien

Ergebnis: Annäherung an die methodisch-konzeptionellen Grundlagen und an die institutionellen Rahmenbedingungen von Credit-Systemen bzw. von national verwendeten Anrechnungsverfahren; vier Länder-studien liegen vor

Abschluss der Arbeitsphase 2: April 2010 (gemäß Planungen)

Arbeitsschritt 3:

Ziel: Herstellung eines gemeinsamen Verständnisses über den Forschungsgegenstand durch Verständigung auf gemeinsame Begrifflichkeit zu „Credit-Systemen“, Formulierung (gemeinsamer) Forschungs-fragen, Entwicklung des Erhebungsinstruments (Interview-leitfäden), Identifizierung potentieller Interviewpartnerinnen und Interviewpartner in den Ländern

Ergebnis: Interviewleitfäden liegen vor; diese sind den nationalen Kontexten angepasst, umfassen jedoch die vorab besprochenen Fragenblöcke

Abschluss der Arbeitsphase: Juli 2010

Arbeitsschritt 4:

Ziel: Wissensgenerierung über Umsetzung, Nutzung und Wirkung von vorhandenen Anrechnungsverfahren an den definierten Schnittstellen sowie über deren Passfähigkeit mit europäisch und/oder national diskutierten Modellen zur verbesserten Anrechnung im Bildungssystem durch die Durchführung von Experteninterviews und deren qualitative inhaltsanalytische Auswertung.

Ergebnis: seit Sommer 2010 werden in allen untersuchten Ländern qualitative Interviews durchgeführt). In DE wurden 22 Interviews durchgeführt, gegenwärtig werden die Interviews ausgewertet. Im Juli 2011 wurde der Auftrag zur Transkription und Auswertung von 10 Interviews vergeben.

Abschluss des Arbeitsschrittes: Die Zusammenführung der Interviewprotokolle in eine auswertende (deutsche) Länderstudie ist für Oktober 2011 vorgesehen. Zum gleichen Zeitpunkt werden auch die Länderstudien aus Schottland, den Niederlanden und Dänemark vorliegen.

Anmerkung: Die Verzögerung der Arbeitsphase ergab sich durch die haushaltsbedingten Schwierigkeiten des BIBB in 2010, die die zeitliche „Streckung“ des Projektes auf IV/2011 zur Folge hatten.

Arbeitsschritt 5: Ziel: Zusammenführung der Interviewergebnisse aus den beteiligten Ländern(Systematisierung). Bestandaufnahme über Möglichkeiten, Optionen und Regelungsbedarfe im Hinblick auf die unterschiedlichen Formen und Rahmenbedingungen von Anrechnungsmodellen zum lebenslangen Lernen in den Ländern sowie auf potentielle Hindernisse bei der Einführung und Nutzung von ECVET in den nationalen Systemen.
Voraussichtlicher Abschluss der Arbeitsphase: Dezember 2012
Zu erwartendes Ergebnis: Aufsätze und Vorträge auf internationaler Ebene (2013), Publikation im Rahmen eines Wissenschaftlichen Diskussionspapieres (März 2014)

Arbeitsschritt 6: Ziel: Verbreitung der Projektergebnisse bei Konferenzen, Tagungen und im Rahmen von Entwicklungsprojekten durch Veröffentlichungen, Aufsätze, referierte Beiträge und Vorträge. Generierung eines neuen Forschungsprojektes, das an die Ergebnisse des vorliegenden Projekts anschließt.
Voraussichtlicher Abschluss der Arbeitsphase: März 2014
Zu erwartende Ergebnisse: Aufnahme eines neuen Forschungsprojektes in Jahresforschungsprogramm 2012, Teilnahme an internationalen Konferenzen, Aufsätze in Sammelbänden, referierter Beitrag, diverse Vorträge zum Thema (2013), Veröffentlichung eines Wissenschaftlichen Diskussionspapieres zum Thema (2014).

6 Ausblick und Transfer

Die Ergebnisse des Forschungsprojektes flossen sowohl in die europäischen Referenzprojekte zur Erprobung von ECVET ein (hierbei zu nennen vor allem die Projekte, die sich mit der Einführung von ECVET im nationalen Bildungssystem beschäftigten (EASYMetal und ESYCQ)), als auch in die Diskussion der nationalen Pilotinitiative DECVET und in Beratungsaktivitäten des Bundesinstituts im In- und Ausland (hier z.B. die Keynote zu „ECVET in reality“ bei der Veranstaltung von Entscheidungsträgern in der Berufsbildung in Oslo/Norwegen im Juni 2013 sowie dem Einführungsvortrag „Anrechnung in Deutschland - Das Spannungsfeld zwischen europäischer Zielvorgabe und nationaler Praxis“ bei der Abschlusstagung des Projektes EASYMetal in Bad Nauheim im Juni 2013). Die Auswertung der deutschen Interviews bildete das Gerüst für den Beitrag „Anrechnung in Deutschland: ECVET meets BBiG“, der in einem deutschen und in einem englischsprachigen Wissenschaftlichen Diskussionspapier des BIBB erschien (EBERHARDT, Christiane (Hrsg.): Implementing ECVET: Anrechnung, Anerkennung und Transfer von Lernergebnissen zwischen europäischen Zielvorstellungen und nationalen Systembedingungen, Bundesinstitut für Berufsbildung, Wissenschaftliche Diskussionspapiere, Heft 145, S. 59-78). Darüber hinaus wurden die Ergebnisse der wissenschaftlichen Community bei der ECER in Istanbul (Oktober 2013), der 12th Annual Hawaii International Conference on Education, Januar 2014 und bei der TT-Net Herbsttagung 2013 präsentiert.

Von den ursprünglichen Planungen, die Hintergrundberichte in einem eigenständigen WDP zugänglich zu machen, wurde aufgrund der aufgetretenen zeitlichen Verzögerungen abgesehen.

Veröffentlichungen

ANNEN, Silvia / EBERHARDT, Christiane: Recognizing Lifelong Learning via Credit Systems – Strategies and Practices of Selected European Countries. In: International Journal for Cross-Disciplinary Subjects in Education (IJCDSE), Special Issue Volume 5 (2013) Issue 1, ISSN 2042 6364 (Online)

EBERHARDT, Christiane; ANNEN, Silvia (2013): Anrechnung in Deutschland: ECVET meets BBiG, in: EBERHARDT, Christiane (Hrsg.): Implementing ECVET: Anrechnung, Anerkennung und Transfer von Lernergebnissen zwischen europäischen Zielvorstellungen und nationalen Systembedingungen, Bundesinstitut für Berufsbildung, Wissenschaftliche Diskussionspapiere, Heft 145, S. 59-78.

EBERHARDT, Christiane / ANNEN, Silvia (2013): Credit-Transfer in Germany: ECVET meets BBiG, in: EBERHARDT, Christiane (Hrsg.): Implementing ECVET: Crediting, recognition and transfer of learning outcomes between European target stipulations and national system conditions, Bundesinstitut für Berufsbildung, Wissenschaftliche Diskussionspapiere, Heft 146, S. 56-75.

HOWIESON, cathy / RAFFE, David (2013): The Paradox of Scotland: Limited Credit Transfer in a Credit-based Lifelong Learning System, Oxford Review of Education, 39(3), pp.366-384. (CES REF 1208)

EBERHARDT, Christiane / ANNEN, Silvia (2013): Transferring without accumulating: Credit-Transfer in Germany, Credit Systems for Lifelong Learning (CS3L), Final Report (erscheint demnächst)

HOWIESON, Cathy and RAFFE, David (2012) The Paradox of Scotland: limited credit transfer in a credit based system, CES Briefing No. 60, Edinburgh: Centre for Educational Sociology, University of Edinburgh (CES REF 1214)

HOWIESON, Cathy / RAFFE, David with KINSELLA, Abigail (2012): Credit systems for lifelong learning: final country report on Scotland, Final report to the German Federal Institute of Vocational Training, Edinburgh: Centre for Educational Sociology, Edinburgh (CES Ref 1201)

RAFFE, David, HOWIESON, Cathy and HART, John (2010) Credit systems for lifelong learning: CS3L background report on Scotland, report to the German Federal Institute of Vocational Training, Edinburgh: Centre for Educational Sociology, Edinburgh

LARSEN, Jorgen Ole; FRIMODT, Rasmus: CS3L-Background Report Denmark, Kopenhagen 2010

EBERHARDT, Christiane; ANNEN, Silvia: CS3L-Background Report Germany, Bonn 2010

DUVEKOT, RUUD C. / HANEKAMP, Marijke (2010): Access into and transition between credit-systems in the Netherlands. Background report on “Credit-systems for lifelong learning (CS3L)”, Arnhem: Cofora.

Paper und Präsentationen

Crediting Prior Learning in Europe – Selected National Strategies and Practices, paper von Silvia ANNEN / Christiane EBERHARDT, präsentiert von Silvia Annen bei der **12th Annual Hawaii International Conference on Education**, Januar 2014

Zur Nutzung von ECVET im Spannungsfeld zwischen europäischer Zielvorgabe und nationaler Umsetzungspraxis: Anrechnung in Deutschland, Vortrag und Präsentation von Christiane EBERHARDT bei der **TT-Net DE-Herbsttagung,** 21./22.November 2013, BIBB

Credit Systems for Lifelong Learning – Results of Selected European Country Studies, Vortrag und Präsentation von Christiane EBERHARDT und Silvia ANNEN bei der **ECER Istanbul,** September 2013.

Anrechnung in Deutschland - Das Spannungsfeld zwischen europäischer Zielvorgabe und nationaler Praxis, Vortrag und Präsentation von Christiane EBERHARDT bei der **Abschlusstagung des Projekts EASYMetal** (Europäisches Anrechnungssystem für Teilqualifikationen in Metallberufen), Bildungshaus Bad Nauheim, Juni 2013,
URL: http://easymetal.inbas.com/abschlusstagung.html

ECVET in Reality. Contribution to the Seminar „ECVET in Norway“. Vortrag und Präsentation von Christiane EBERHARDT, **Nationale Stakeholder-Konferenz des Norwegischen Bildungsministeriums**. Oslo, 02.06.2013. www.udir.no/.../ECVET%20Oslo_Eberhardt.pptx

Credit Systems for Lifelong Learning – results of selected European country studies, Vortrag im Rahmen der **Canada International Conference on Education (CICE) 2013** in Toronto, Juni 2013.

Anrechnung in Deutschland - Das Spannungsfeld zwischen europäischer Zielvorgabe und nationaler Praxis, Präsentation von Christiane EBERHARDT bei der Abschlusstagung des Projekts EASYMetal (Europäisches Anrechnungssystem für Teilqualifikationen in Metallberufen), Bildungshaus Bad Nauheim, Juni 2013, http://easymetal.inbas.com/abschlusstagung.html

Anhang/Literaturverzeichnis

ANNEN, Silvia: Anerkennung von Kompetenzen. Kriterienorientierte Analyse ausgewählter Verfahren in Europa, Bonn 2012.

BMBF: 10 Leitlinien zur Modernisierung der beruflichen Bildung – Ergebnisse des Innovationskreises berufliche Bildung, Bonn/Berlin 2007, http://www.bmbf.de/pub/IKBB-Broschuere-10_Leitlinien.pdf, abgerufen am 15.06.2008

BMBF; KMK: German Position on a European Credit System for Education and Training (ECVET), http://www.ec.europa.eu/educatoin/ecvet/results/germany_en.pdf, abgerufen am 15.06.2008

CEDEFOP: Terminology of European education and training policy. A selection of 100 key terms. Luxembourg 2008

DUNKEL, Torsten; LE MOUILLOUR, Isabelle: Qualifikationsrahmen und Credit-Systeme: Ein Bausatz für die Bildung in Europa. European Journal of Vocational Training. Special Issue on EQF, 42, 2007/3

EUROPÄISCHE KOMMISSION: From Bergen to London. The Commission Contribution to the Bologna Process. Directorate-General for Education and Culture. Lifelong Learning: Education and Training policies. School Education and Higher Education, 22 December 2006/rev2, Brussels 2006

EUROPÄISCHE KOMMISSION: Memorandum über lebenslanges Lernen. Arbeitsdokument der Kommissionsdienststelle, SEK (2000)1832, 2000

FROMMBERGER, Dietmar: "Durchlässigkeit" in Bildung und Berufsbildung: Begriff, Begründungen, Modelle und Kritik. In: Profil: Akzentsetzungen in der Berufs- und Wirtschaftspädagogik. 2009. - URL: http://www.bwpat.de/profil2/frommberger_profil2.shtml (abgerufen: 10.03.09)

FROMMBERGER, Dietmar: Transitions and Research on Transitions in VET. Bonn 2009.

GLÄSER, Jochen; LAUDEL, Grit: Experteninterviews und qualitative Inhaltsanalyse, Wiesbaden 2009.

HIPPACH-SCHNEIDER, Ute u.a.: ReferNet-Country Report Germany. The German vocational education and training (VET) system. Bonn 2009. –
URL: http://www.refernet.de/documents/Country_Report_09(4).pdf

LE MOUILLOUR, Isabelle: Europäische Ansätze zu Credit (Transfer) Systemen in der Berufsbildung. Eine Bewertung der Anwendbarkeit bestehender Credit-Systeme für ein Europäisches Credit(Transfer)System zur beruflichen Bildung, CEDEFOP Dossier series; 12. Luxembourg: Office for Official Publications of the European Communities, 2005

LE MOUILLOUR, Isabelle; SELLIN, Burkhart; JONES, Simon: First report of the technical working group on credit transfer in VET. Brussels, October 2003

OECD: Qualifications systems. Bridges to lifelong learning, Paris 2007

RAFFE, David / HOWIESON, Cathy (2013) Hybrid qualifications in a credit-based system: Scottish Higher National Certificates and Diplomas, in T.DEISSINGER, J.AFF, A.FULLER and C.JØRGENSEN (eds) Hybrid Qualifications – structural and political issues in the context of European VET policy, Studies in Vocational and Continuing Education - Volume 10, Bern: Peter Lang. (CES Ref 1133)

RAFFE, David; GALLACHER, Jim; TOMAN, Nuala: Das schottische Rahmensystem für Anrechnungseinheiten und Qualifikationen (SCQF): Ein Beispiel für den Europäischen Qualifikationsrahmen, in: Europäische Zeitschrift für Berufsbildung, Nr. 42/43, S. 68-80.

RECOMMENDATION of the European Parliament and of the Council on the Establishment of a European Credit System for Vocational Education and Training (ECVET). 17 April. Brussels 2009

Credit Systems for Lifelong Learning: Country Background for Scotland

Cathy Howieson and David Raffe with Abigail Kinsella,
Centre for Educational Sociology
University of Edinburgh[2]

INTRODUCTION

This is the final report of the study of the credit system in Scotland carried out as part of a comparative study of Credit Systems for Lifelong Learning. The study involved four countries – Denmark, Germany, The Netherlands and Scotland - and was co-ordinated by the Federal Institute for Vocational Education and Training (BIBB) in Germany. Each country has written its final report following a common format and BIBB will produce a synthesis report based on these country studies.

We previously produced a background report as part of the first phase of the study describing the VET system in Scotland and outlining the development of arrangements for credit (www.ces.ed.ac.uk/research/Credit/publications/background.pdf) (RAFFE, HOWIESON and HART 2010). This report draws on the background report and extends it by considering the further development, impact and operation of credit transfer in practice based on a programme of interviews with key actors in Scotland.

We would like to thank the individuals and organisations who participated in the interviews for their time and for the information and insights they gave us; the views and conclusions expressed in the report, are of course, our own. We are also grateful to our colleagues John Hart and Abigail Kinsella for their contributions to the study.

SECTION 1: FRAMEWORK CONDITIONS

The VET system

Vocational Education and Training (VET) in Scotland stands in a state of semi-independence from the rest of the UK. Scotland has always had a distinct education system; before 1999 this was administered separately by the Scottish Office, a department of the UK government, and many distinctive features of Scottish VET are the result of policy decisions that were specific to Scotland but taken by the pre-devolution UK government. Since 1999 VET has been the responsibility of the Scottish Government and Parliament whose devolved powers include education and training. It falls under two departments of the Scottish Government, the Employability, Skills and Lifelong Learning Directorate (whose policy areas include colleges, universities, training programmes and skills development) and the Learning Directorate (whose policy areas include schools, qualifications and the 3-18 curriculum). Both are under the minister (called 'Cabinet Secretary') for Education and Lifelong Learning. Other bodies with a national remit include Skills Development Scotland (SDS: responsible for public training programmes and careers guidance), the Scottish Qualifications Authority (SQA: responsible for most non-university qualifications), Scotland's Colleges (the representative body whose activities include curriculum development and support), the Scottish Funding Council (SFC: responsible for funding teaching and learning provision, research and other activities in Scotland's 41 colleges and 19 universities and higher education institutions), Education Scotland (a body created in 2011 which incorpo-

[2] **Contact details:** Dr Cathy Howieson (email: c.howieson@ed.ac.uk; tel: 0131 651 6241) and Prof David Raffe (email: d.raffe@ed.ac.uk; tel: 0131 651 6237), Centre for Educational Sociology, University of Edinburgh, St John's Land, Holyrood Road, Edinburgh EH8 8AQ

rates the main quality assurance body for non-university education, Her Majesty's Inspectorate of Education), the Alliance of Sector Skills Councils in Scotland and the Scottish Modern Apprenticeships Group.

However, the UK dimension is still important. Industrial training policy was a UK-wide responsibility in the 1970s and 1980s when it was led by the tripartite Manpower Services Commission. VET, as a field embracing both education and training, therefore incorporates elements with a long Scottish pedigree (such as the key VET institutions, - the colleges and the former vocational higher education institutions which became universities after 1992) and elements that draw on its UK heritage (such as national occupational standards and qualifications based on these, including Scottish Vocational Qualifications, SVQs). VET is affected by certain policy areas reserved to the UK government, including public finance, professional regulation and aspects of employment and skills policy. The Sector Skills Councils (SSCs), which develop national occupational standards, cover the whole UK, although their detailed responsibilities vary significantly between Scotland and England. The UK Commission on Employment and Skills (UKCES), although primarily an advisory body, is distinctive because it offers advice both to the UK government and to the devolved administrations in Scotland, Wales and Northern Ireland. Perhaps more importantly, the dependence of Scottish VET on an integrated UK labour market, and the influence of closely connected UK higher education systems, put a limit to its divergence from the rest of the UK. The relative autonomy of Scottish VET within the UK has been compared by some commentators to that of Member States within the European Union.

VET is not a clearly defined sector of Scottish education and the term 'vocational' is applied to a wide range of types of learning. Work-based programmes, including Modern Apprenticeships, which aim to develop competence in specific occupational roles, are generally regarded as vocational. So are many programmes offered by Scotland's Colleges (see below), including those at higher education (sub-degree) level, which offer a broader preparation typically based on wider occupational areas. However, the term 'vocational' may also be applied to a number of courses for secondary-school pupils and to programmes which target disengaged or unemployed young people, although these might also be termed 'pre-vocational'. The term 'vocational' may also be applied to provision offered by a variety of training providers including private and voluntary-sector organisations, and to programmes delivered or controlled by professional associations.

Qualifications

VET is not based on a regulated system of occupations, and there is seldom a single qualification which gives entry to an occupation, although a growing number of occupations are subject to some degree of regulation and in some occupations a body has been identified or established to make judgements about which qualifications are acceptable for entry or for specific roles (eg counselling, accountancy). The variety of vocational learning in Scotland is reflected in the range of qualifications:

Scottish Vocational Qualifications (SVQs) are unitised, competence-based qualifications available at five levels, based on National Occupational Standards for specific occupations. They are intended to be delivered in the workplace and/or in partnership with a college or training provider. They are awarded by a range of bodies, including the SQA and professional and industry organisations, and they are formally accredited by a special division of the SQA. In principle they cover most occupations but they tend to be used most frequently at lower or intermediate levels and in particular sectors such as business administration, care, construction, hairdressing and hospitality. SVQs are similar in conception and design to the NVQs (National Vocational Qualifications) formerly offered in the rest of the UK; NVQs are now being replaced by qualifications in the Qualifications and Credit Framework (QCF) which has no direct equivalent in Scotland.

National Qualifications and *Higher National Qualifications* are unit-based qualifications awarded by the SQA. Units may be taken separately or as part of group awards or National Courses. Larger group

awards include National Certificates, available at lower and intermediate levels, Higher National Certificates (HNCs) and Higher National Diplomas (HNDs); they typically represent one or two years' full-time study (or its part-time equivalent) and are usually delivered in colleges. Smaller but flexible group awards include National Progression Awards (NPAs), which certificate skills in a specialist vocational area, and Professional Development Awards (PDAs) which allow those already in a vocation to extend or broaden their skills. National Qualifications also include National Courses, subject-specific courses at a range of levels which are the main certificates awarded in secondary schools. These include Highers and Advanced Highers which are the main currency for entry to university. Most National Courses are in general or 'academic' subjects but some offer introductions to occupational areas such as administration, business management, care or computing, and they include Skills for Work courses in areas such as care, construction crafts, hairdressing and rural skills.

Four factors give SQA qualifications a great deal of flexibility and distinguish them from many other European systems. First, individual units are intended to have value in their own right and are given a relatively high status in the certification system; second, apart from individual units many qualifications are small in size, so that transfer may take the form of movement from one completed qualification to another rather than transfer of credit between qualifications; third, all qualifications can be delivered by any institution or organisation which meets the relevant requirements of the SQA; and fourth, certification is carried out centrally by the SQA, which maintains a cumulative record of the achievements of individual learners. This means that credit transfer and accumulation are built into the SQA system, so that an individual achieving one or more SQA units in one or more institutions can automatically count it/them towards any full SQA qualification of which it is a component if s/he goes on to complete that qualification in another institution.

Other qualifications include:
University degrees. The main degrees awarded by Scottish universities are Bachelors (awarded at Ordinary or Honours level, typically on the basis of three or four years' study respectively), Masters (typically one year) and Doctor (typically three or more years). Other qualifications include Certificates and Diplomas of HE, which may be awarded to students who complete the first one or two years of a degree programme, and may provide credit towards further degree study. There is no formal distinction between academic and vocational (or professional) higher education, although in fields such as education and medicine the content of qualifications and the programmes that lead to them are regulated by professional bodies.

Qualifications of other awarding bodies. The SQA is sponsored by the Schools Directorate of the Scottish Government, and it is the national body in Scotland responsible for the development, accreditation, assessment and certification of qualifications other than university degrees. When qualifications are introduced or re-designed in pursuit of national policy, the SQA is usually given responsibility for this task. However, schools and (especially) colleges are able to choose qualifications awarded by other bodies, especially those based elsewhere in the UK. Vocational qualifications awarded by the City and Guilds of London Institute continue to occupy a niche in some occupational areas. The European Computer Driving Licence is also widely used in Scotland as are IC3 certification and Microsoft and Cisco vendor awards.[3] Pre-vocational qualifications or those which recognise personal development or achievement, such as ASDAN (Award Scheme Development and Accreditation Network), are also widely used.[4] Qualifications intended for use in England, Wales and Northern Ireland are also offered in Scotland: this may happen when, for example, an employer operating across the UK is unwilling to work with both SVQs and their English counterparts.

[3] SQA has credit transfer arrangements in place for all of these awards.

[4] Both ECDL and ASDAN awards have been credit-rated by SQA for inclusion in the SCQF.

Employer and professional awards. These include awards by professional bodies in fields such as accountancy, banking and engineering, as well as awards by employers ranging from the police and fire services to hoteliers and whisky distillers. Some are jointly awarded with the SQA.

All SVQs, National and Higher National qualifications and university degrees, and a growing proportion of other qualifications, are placed in the Scottish Credit and Qualifications Framework (SCQF). This is described further below.

The main providers of VET

Scotland's Colleges, 41 publicly-funded institutions, are, with the universities, the main providers of post-school learning. They provide full- and part-time courses and programmes in a variety of vocational and non-vocational subjects, and leading to nearly all the qualification types reviewed above. They have a strong tradition of access and responsiveness: of promoting access to education among all learners, including the socially disadvantaged and those at risk of exclusion, and of responding flexibly to the demands of learners, employers and local communities.

Higher Education Institutions, 16 universities and three other institutions, provide degree-level programmes in a range of (vocational and non-vocational) areas. Seven universities acquired their current status after 1992 when the higher education sector was unified and the former Central Institutions, vocational institutions under more direct government control, became universities. These 'post-1992' universities tend to have higher proportions of mature and part-time students, and they have been most active in credit developments (Gallacher et al. 2006).

Secondary schools cater for young people between the ages of 12 and 18, although attendance is compulsory only up to age 16. About two-thirds of each year group continues in school to age 17 and nearly a half to age 18. Except for a small independent sector, which caters for about 4% of the age group, all secondary schools are comprehensive, co-educational and administered by elected local authorities. The curriculum of Scottish secondary schools is predominantly academic or general, although there have been attempts to increase its vocational (or more typically pre-vocational) content.

Other institutions include *training providers*, a wide variety of private organisations which provide training courses for employers and often manage public training programmes, *employers* (or groups of employers) who provide training for their own workers, possibly in collaboration with colleges or training providers, and *voluntary organisations* which are increasingly involved in delivering programmes for the least advantaged young people. The term *community learning and development* (CLD) refers to informal learning and social development work with individuals and groups within their communities. It includes youth work, community-based adult learning and support for community capacity-building. It is provided by local authorities and partner agencies in the public and voluntary sectors.

'Work-based' programmes

The *Modern Apprenticeship* programme is managed and delivered by Skills Development Scotland. Modern Apprenticeships are based on frameworks developed by the Sector Skills Councils and lead to occupational SVQs (or NVQs) together with relevant core skills; most are at craft level but there are a few higher-level Modern Apprenticeships and Modern Apprenticeships are currently being extended to lower-level SVQs, replacing the former programme (*Skillseekers*) at that level. Modern Apprenticeships are open to employed trainees of all ages but young people receive priority for public funding. Other programmes are aimed at young people or adults who need support in developing basic skills or accessing employment. These include *Get Ready for Work* for 16-19 year-olds and *Training for Work* programmes for unemployed adults. The UK government's *Work Programme*, which replaced a range of *New Deal* programmes in 2011, is also available to unemployed people in Scotland.

Access and transition

Access to VET programmes, and transition between programmes, is usually at the discretion of the provider, and there are few formal entry requirements. Although the SCQF, and in particular the portfolio of qualifications awarded by the SQA, are designed to provide progression sequences, typically connecting qualifications at different levels in the same field, many learners are likely to join at different points in the sequence. One implication is that selection decisions for some types of VET (such as college courses) may be more concerned with the level at which a learner joins this sequence rather than with whether or not they join it at all. Prior qualifications, other learning and experience, and the core skills demonstrated by the learner, are all likely to be taken into account.

Political framework

Credit arrangements in Scotland, and their underlying concepts of credit, have developed over the course of several reforms since the 1980s. These include:

Action Plan. Initially called the 16-18 Action Plan, this 1983 document introduced a national framework of modules which replaced most non-advanced vocational courses in colleges, were used to certificate young people and some older workers on training programmes, and came to supplement more traditional academic courses in schools. The Action Plan aimed to aimed to modernise the vocational curriculum and to stimulate participation in learning by increasing opportunities for 'less academic' learners, by making the system more flexible and by encouraging more learner-centred pedagogies. Although it was not formally a credit system, the modular framework had many credit-like features. In the first place, it was based on modules, each of notional 40-hour design length (with half- and double-modules); in formal VET the 40 hours tended to be interpreted as contact time or scheduled learning time. Funding for colleges was based on the 40 hours which became known as a SUM (Student Unit of Measurement) and in other contexts as a 'credit'. Second, each module was defined by learning outcomes and associated performance criteria, and was intended to be 'institutionally versatile' - that is, capable of delivery in a range of institutional settings. Third, all modules were placed in a single national catalogue and awarded by a single body, which later merger with the main academic qualifications body to become the SQA. It was expected that colleges would devise programmes based on modules from the catalogue and give credit for modules already completed elsewhere. Young people who had taken a few modules at school, it was hoped, would thus have an incentive to continue learning in a college where they could use their accumulated credit. Fourth, it was intended that more generic modules such as communication and numeracy would be included in different programmes, facilitating horizontal transfer. Finally, although modules were individually certificated they could contribute to some group awards, including some SVQs and, from 1993, new awards, intended mainly for delivery in colleges, known as General SVQs. These qualifications helped to establish a pattern of national qualifications based on the accumulation of units or credits.

Unitisation of Higher National awards. In 1988 SCOTVEC launched a programme which unitised HNCs and HNDs, with a rationale and objectives similar to the Action Plan, but with the additional aim of developing clearer pathways from the Action Plan modules to HN awards. In contrast to the Action Plan modules, the new HN units were designed primarily as components of group awards, that is HNCs and HNDs, although they could also be individually certificated. HNCs and HNDs had previously been distinct awards for part-time and full-time study respectively. They were re-designed as new qualifications linked by credit transfer: in many subjects, all or most of the 12 unit credits that comprised an HNC could count towards the 30 credits required for an HND. The new qualifications were similarly intended to provide credit towards degree courses, where articulation agreements between colleges and universities made this possible. In such cases an HND might give exemption for up to the first two years of a four-year Honours degree course.

The introduction of SVQs. SVQs were introduced in the early 1990s. They are unitised, competence-based occupational qualifications at five job-related levels, based on national occupational standards. They were mainly delivered as whole qualifications but employers sometimes selected the units that they perceived to be most relevant. Some SVQs were based on Action Plan modules, with a possibility of credit transfer from other types of programmes, but most were based on specially designed units intended to facilitate workplace assessment. This, and the fact that SVQs were not included within the 'unified system' introduced by Higher Still (see below), may have marginalised them from the main arenas wherein credit transfer may occur. In principle, different SVQs may have units in common, making credit transfer possible, but this is not common.

The Scottish Credit Accumulation and Transfer (SCOTCAT) Scheme. SCOTCAT was launched in 1991 as the credit system for higher education. It established a currency of one credit equal to ten hours' study time (later re-defined as the notional learning time for the average student to achieve the outcomes). Each year of a full-time programme was assumed to comprise 1200 hours' learning time or 120 credit points. The scheme defined five levels of higher education study, four corresponding to the different years of a four-year Honours degree and a fifth for Masters. It thus not only introduced a concept of credit that was to be the basis for the current framework; it also established the idea that credit points had to be awarded at a specific level and that a qualification or programme could be based on credits achieved through working up through a series of levels. By 1992 all universities and other higher education institutions had signed up to SCOTCAT and agreed to modify their provision to fit with it, although it had most impact on 'new' universities and in the context of local credit accumulation and transfer arrangements.

Higher Still/National Qualifications. Starting in 1999, the Higher Still reform replaced Action Plan modules and post-16 school courses with a single 'unified system' of units and unit-based courses. The new National Qualifications combined elements of both systems, and covered most academic courses below higher education level and a substantial proportion of vocational courses apart from SVQs. They thus brought academic and vocational courses, and school and college courses, into a single framework. The new framework retained the concept of a 40-hour unit introduced by the Action Plan; schools typically delivered single-subject courses each comprising four units (with around five courses in an annual programme), whereas college courses were more often constructed from stand-alone units. Over-arching Scottish Group Awards, based on combinations of courses or units, were designed to recognise coherent programmes but had low take-up and were eventually withdrawn. Courses and units were developed at seven levels, ranging from a level appropriate for those with severe learning difficulties to the highest level of pre-university study. The curriculum introduced by Higher Still has been described as a 'climbing frame' model because it allowed flexible choices of courses with movement in all directions.

The Scottish Credit and Qualifications Framework. The SCQF was formally launched in 2001 on the basis of a consultation in 1999. It is a comprehensive framework intended to accommodate all qualifications and assessed learning in Scotland. Each qualification in the framework, and each separate unit or component of a qualification, is given a number of credit points representing the volume of study and allocated to one of the twelve levels of the framework. The SCQF started as a merger of three 'sub-frameworks' that had been created by earlier reforms: the SCOTCAT scheme, the National Qualifications 'climbing frame' introduced by Higher Still and SVQs. The SCQF's twelve levels were based on the five SCOTCAT levels (with an extra level added for Doctorates) and the seven levels of National Qualifications, the top one of which was deemed to be the same as the bottom SCOTCAT level. Level descriptors were adapted from the existing frameworks and the concept and measure of credit were taken from SCOTCAT. They describe the characteristics of learning and of expected performance at each level in relation to five types of learning outcomes:

- knowledge and understanding;
- practice (applied knowledge and understanding);
- generic cognitive skills, such as evaluation and critical analysis;
- communication, ICT and numeracy skills;
- autonomy, accountability and working with others.

The SCQF's launch document described its 'general aims' as to:

- help people of all ages and circumstances to access appropriate education and training over their lifetime to fulfil their personal, social and economic potential;
- enable employers, learners and the public in general to understand the full range of Scottish qualifications, how the qualifications relate to each other, and how different types of qualifications can contribute to improving the skills of the workforce (SCQF 2001, p.vii).

Note that the second aim in particular was about more than credit transfer. Credit became an important tool for designing and describing qualifications, and for planning their interrelationships; it was part of the 'national language' of learning that the SCQF aimed to provide. According to the SCQF Handbook: 'The SCQF provides a vocabulary for describing learning and helps to:

- make the relationships between qualifications and learning programmes clear;
- clarify entry and exit points, and routes for progression;
- maximise the opportunities for credit transfer;
- assist learners to plan their progress and learning;
- minimise the duplication of learning (SCQF 2009a, p.11).

The SCQF was led by a partnership of HE bodies, the SQA and the government. In 2007 this arrangement was strengthened by the establishment of the Scottish Credit and Qualifications Framework Partnership, a company limited by guarantee (that is, a 'not for profit' charity). The Partnership has an Executive Board which consists of members from the partner organisations plus an independent chair. The partners are Universities Scotland (representing higher education institutions), the Quality Assurance Agency for Higher Education, the Scottish Qualifications Authority (SQA), Scotland's Colleges and the Scottish Government.

The SCQF Partnership has a small executive, with a staff of around ten people led by a Chief Executive. A Quality Committee is responsible for maintaining the SCQF guidelines, ensuring consistency in the process and criteria for admitting qualifications to the framework (credit-rating - see below) and aligning the SCQF with other national and international frameworks. An SCQF Forum represents the main stakeholder interests, promotes the use of the framework and provides feedback on its design and implementation.

The process by which qualifications are accepted into the SCQF is called 'credit-rating'. The SQA and the universities, whose qualifications formed the nucleus of the original SCQF, have always had the powers to credit-rate their qualifications and place them in the SCQF. The colleges were accepted as credit-rating bodies after a pilot in 2005-06, at around the same time as they became partners in the SCQF. A further pilot and consultation in 2007-08 led to new criteria and procedures being established under which other organisations could gain credit-rating powers. In 2009 it was announced that these powers would be given to City and Guilds (a UK awarding body), the Scottish Police College and two professional bodies representing banking and management respectively. In order to become a credit-rating body an organisation must:

- be a body of good standing, demonstrating a track record in the design and delivery of learning provision in Scotland;
- have in place a documented quality assurance system for programme design, approval, validation, accreditation, assessment or other related activities, with evidence of reliability and validity; and
- have the necessary capacity and commitment and ensure that its credit-rating processes link to, and function within, the quality assurance system described above.

When approved as an SCQF credit-rating body, an organisation can credit-rate its own qualifications and learning programmes, and those of partners covered by the same quality assurance system. An organisation may be approved to credit-rate other organisations' qualifications and programmes if it meets further requirements that demonstrate its capacity, commitment and experience to do so and that it has appropriate structures and systems in place.

Qualifications in the SCQF are registered on a national database (http://www.scqf.org.uk/Search%20The%20Database).

The SCQF has no regulatory function; it is an enabling framework and participation is voluntary. This, and the fact that the main awarding bodies are represented among the partners, helps to explain its small bureaucracy: many of the functions of regulatory agencies in other systems are carried out by the SCQF Partners in Scotland. The SCQF has been represented as an instrument of change rather than a driver or agent of change (Gallacher et al. 2005). Its increasing use as the language of learning in Scotland may push it towards a more 'regulatory' role, because the language of learning necessarily becomes the language by which learning is regulated, but this is unlikely to make the recognition or transfer of credit mandatory.

The process of creating the SCQF was thus incremental and pragmatic. It proceeded through a series of reforms, which successively established the main building blocks of a credit system - units, levels and measures of credit volume - in what became the different sub-frameworks of the SCQF (Raffe 2007, 2011). Definitions based on the existing system were used to rationalise the system. It was pragmatic: it went with the grain of existing educational arrangements; it offered a basis for reviewing and reforming them but it did not try to impose a new blueprint. For instance, the process whereby credits and levels were assigned to university courses initially reflected existing conventions and assumptions much more than it reflected a rigorous analysis of the learning outcomes; but over time the framework was used as a tool in routine processes of review and redevelopment, so that the framework and educational practice tended to converge over time. Other aspects of pragmatism were the simplifying assumptions to prevent the system becoming too complex. For example, National Courses at the same level received the same number of credit points although they might take up varying amounts of time in school timetables.

Unusually among National Qualifications Frameworks the SCQF is led by a voluntary partnership of educational institutions and awarding bodies. However, it would be misleading to characterise it simply as a bottom-up reform. In the first place, the partnership does not include all institutions; initially only higher education institutions were actively involved and the colleges (the sector with the most to gain or lose from a credit framework) were not admitted to the leadership of the SCQF until 2006. Other VET or education providers are still not directly represented. This is a further example of the pragmatism of the SCQF, in that it recognised political realities. Second, the SCQF built on a series of reforms, most of which (Action Plan, SVQs, Higher Still) were government-led. Third, the direct influence of learners on the process was rarely visible, despite the rhetoric of the learner-centred system that the framework was intended to create.

Drivers

The policy drivers have varied across the different stages of the historical process outlined above, but they have included the desire or perceived need to:

- raise participation and enhance progression, especially among young people, by providing more opportunities particularly for those with middle or lower levels of attainment in compulsory school;
- make VET more attractive by developing pathways within VET and from VET to general/higher education, by integrating vocational and general learning; to promote parity of esteem;
- reduce exclusion by enhancing opportunities for those at risk and recognising existing skills and prior learning on which to build;
- update VET, enhance its relevance and promote pedagogical change;
- rationalise provision and enhance the coherence and coordination of the learning system.

Not all of these aims related specifically to credit, and where credit was a central feature of reform its role was often to support the management of learning as much as to provide opportunities for transfer. There have been changes in emphasis over time. For example, efforts to raise participation and progression focus primarily on under-represented groups (the 'widening access' agenda) and young people at risk of becoming not in education employment or training (the 'more choices, more chances', agenda). Parity of esteem has increasingly become seen as an inappropriate or unrealistic goal; pathways between VET and HE are seen as means to increase or widen participation in HE rather than as ways to raise the status of VET. Above all, and especially in the context of the economic downturn, economic aims have become dominant. The Scottish Government's 'core purpose' is 'to create a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth'.

Current developments in credit are influenced by four main policy drivers:

Developing skills for economic growth and competitiveness. The government's skills strategy published in 2007 (Scottish Government 2007) saw skills as a means both to individual development and economic success. It departed from earlier policies, and those pursued elsewhere in the UK, by emphasising the need to boost the demand for skills and the utilisation of skills as well as their supply. One implication is that skills need to be recognised if they are to be utilised effectively. The document asked the SCQF Partnership to 'move quickly to ensure that the SCQF embraces more learning opportunities by increasing the number of credit rating bodies; facilitating the inclusion of work based learning programmes and encouraging the recognition of informal learning' (SCOTTISH GOVERNMENT 2007, p.49). Its emphasis on 'cohesive structures' for lifelong learning was echoed in two documents published in 2011. The *Review of Post-16 Education and Vocational Training in Scotland* (Scottish Government 2011a) and the subsequent *Putting Learners at the Centre: Delivering our Ambitions for Post-16 Education* (Scottish Government 2011b) both emphasised the need for a more coherent, flexible, easily navigable and learner-centred learning system. The current reform of the school and college curriculum for 3-18, *Curriculum for Excellence* (Scottish Executive 2004), aims to develop 'four capacities' of young people – as successful learners, confident individuals, responsible citizens and effective contributors – and to promote cultural change and school- and teacher-led innovation. The years from 15-18 will form 'a senior phase which provides opportunities for study for qualifications and other planned opportunities for developing the four capacities' and support for moving into 'positive sustained destinations' (SCOTTISH GOVERNMENT 2008, 13). The first cohort will enter the senior phase 2013; new qualifications at SCQF levels 4 and 5 and revised qualifications at other levels will be introduced at this time. Schools have latitude in how they organise the senior phase, which potentially could involve greater flexibility in the accumulation of credit (RAFFE, HOWIESON and HART 2010a).

Post-16 participation. Scotland has one of the highest proportions of young people not in education, employment or training in the OECD (SCOTTISH EXECUTIVE 2006, OECD 2007). This is aggravated in the current recession, and the decline in job opportunities for young people. Young people have recently had priority in the allocation of funding to colleges. In contrast to the UK government's policy for England, the Scottish Government does not plan to extend compulsory education beyond 16. However, the senior phase of *Curriculum for Excellence* is committed to providing support for moving into 'positive sustained destinations (SCOTTISH GOVERNMENT 2008). Following local pilots *16+ Learning Choices* was introduced across Scotland in December 2010, as part of *Curriculum for Excellence*. It entitles all young people to an offer of suitable post-16 learning when they leave compulsory education or any subsequent learning episode during the senior phase (SCOTTISH GOVERNMENT 2010). This entitlement is to be delivered by local partnerships, led by local authorities, through a model designed to ensure that the right learning opportunities, the right support (including information advice and guidance) and the right financial support are available. A range of providers, including the voluntary sector, contribute to this provision, potentially creating a need both for credit transfer opportunities and for measures to recognise the learning that may take place in non-formal or informal settings.

Widening access. There is a commitment to widening participation in learning of all kinds, and especially in higher education, and increasing participation among social groups that are currently underrepresented (SFC 2005). Progress in enhancing participation among socially disadvantaged groups is monitored using the Scottish Index of Multiple Deprivation (SIMD) ranking of students' home addresses. The SIMD ranks 6505 small areas in Scotland on the basis of six dimensions, which are aggregated to produce an overall dimension of social deprivation. Current policies aim to enhance the proportion of learners from the most deprived quintile (or sometimes two quintiles) of areas.

Efficient, flexible learner journeys. *Putting Learners at the Centre* (Scottish Government 2011b) reiterated the Scottish Government's desire to enhance the flexibility, and where appropriate shortening the length, of journeys into and through higher education. Credit, and the full implementation of the SCQF, have a potential role in this policy aim, which partly reflects a desire to save costs in view of a perceived funding crisis affecting higher education. School leavers have traditionally entered university on the basis of their Highers results (at SCQF level 6), and progress to first-year programmes at SCQF 7, but many will have one or more Advanced Higher passes at level 7. Few currently receive credit for this learning (eg in the form of entry with 'advanced standing to second-year courses); it is suggested that more universities might offer this, although there is relatively little demand from students. More credit transfer takes place between HNC and HND courses, which respectively offer credit equivalent to the first year or two of a university degree. Universities vary in their willingness to recognise this credit, but in many subject areas 'articulation routes' have been developed by colleges and universities, who design HN and degree programmes in order to facilitate transfer with full credit. Such articulation arrangements have been supported by the government and the Scottish Funding Council, especially as a contribution to widening access but also, increasingly, as part of the government's skill strategy (RAFFE and HOWIESON forthcoming).

The increased focus on the recognition of prior learning (RPL) reflects all of these policy drivers, and in particular the increased importance of skills. RPL is seen as a way to recognise the skills of the existing workforce and thereby to promote a skills utilisation and workforce development agenda in addition to a lifelong learning and social inclusion one. The concern (for instance) to facilitate RPL for migrant workers and refugee groups not only aimed to promote social cohesion but was also part of government strategy to raise the skill levels of the Scottish labour force (SCOTTISH GOVERNMENT 2004, 2007). RPL is also a strand within policies to promote faster, more efficient learner journeys. Within certain sectors such as social care, early education and childcare, developments in, and use of, RPL have been prompted by the need to enable workers to meet certain mandatory qualification re-

quirements. In relation to HE, the renewed attention to RPL is related to European policies including the 2009 Leuven Communiqué which identified RPL as a significant area for consolidation and development in HE in Europe as part of the Bologna process (WHITTAKER 2011). The use and value of RPL is now also being investigated in the career guidance sector.

Significance of 'crediting'

Level and credit are the two conceptual pillars of the SCQF. In contrast with many other NQFs, credit is built in to the SCQF, a fact which has significant implications for its architecture as well as for its uses.

Learning outcomes in most qualifications are grouped into units, although it is possible to have single-outcome units. A unit is understood to be a coherent collection of learning outcomes and may therefore be assessed separately; a module, on the other hand, is generally understood to be a component of a learning/teaching programme, that is, a unit of delivery. An outcomes-based qualification system therefore prefers the language of units to modules. Within the SQA system, all units are accredited in the sense that individuals who successfully complete even a single unit are given a Scottish Qualifications Certificate. The notion of 'part qualifications' does not have the same significance in the Scottish system as in some other countries, although most candidates take whole qualifications which may take anything from a few weeks to several years to complete. In some cases a smaller qualification can be considered a part of a larger qualification – for example an HNC may be the first half of an HND.

According to the SCQF Handbook 'SCQF credit points give learners, employers and learning providers a means of describing and comparing the amount of learning that has been achieved, or is required to complete a qualification or learning programme' (SCQF 2009a, p.35). Credit points relate to the time required to achieve a qualification, with one credit representing a notional ten hours of learning. 'This is notional because it is based on the time judged to be required for an 'average' learner at a specified SCQF level to achieve the learning outcomes and does not measure the time actually taken by any individual learner' (SCQF 2009a, p.36). Credit is specific to a level and is based only on the volume of learning at that level, as expressed by the notional learning hours required to achieve the outcomes. It is distinct from other indicators of the quality of learning such as the grade awarded within the level. This is a possible source of confusion as other measures of learning may take account of grades.

The SCQF makes a key distinction between general and specific credit, which respectively relate to credit accumulation and to credit transfer. General credit refers to a fixed volume of credit which is allocated to a qualification or unit in the SCQF. It is the basis of credit accumulation and the design of programmes or qualifications defined in terms of credit volume (see below). Specific credit refers to the credit points that can be transferred into a new programme or qualification - typically one offered by a different organisation or awarding body to that which awarded the general credits. It is the responsibility of the receiving organisation - or the home institution in ECVET terminology - to decide how many of the general points are recognised as specific credit with value in the new programme or qualification.

The SCQF Partnership publishes advisory guidelines for credit transfer, the main burden of which is that processes should be transparent and consistent and 'embedded in general good practice in assuring quality and standards' (SCQF 2009a, p.97).

Credit values are used to define types of qualifications within the SCQF. For example, a National Progression Award must have a minimum of 12 points. The definitions of larger qualifications typically refer to minimum number of credit points at each of a range of levels. For example, an HND must have 240 credit points, of which at least 64, including the units for which grades are awarded, must

be at level 8 and the remainder at level 7 or above. A Bachelors degree at Honours must have at least 480 credit points of which at least 90 must be at level 10 and at least 90 at level 9. Since a full HND is defined as level 8 and an Honours degree as level 10, this shows that in a credit-based framework only a small proportion of credit points need be at the level of the full qualification. These credit points typically refer to the final year of study and reflect an expectation that the level of learning will rise during a programme. The proportion of credit points at the level of the qualification is likely to be smaller, the larger the number of levels in the framework. The unusually large number of levels (twelve) in the SCQF partly reflects the way that it developed in the course of attempts to develop smoothly graduated progression pathways (notably in the 'climbing frame' of Higher Still), although it also reflects the relatively large number of 'access' levels which incorporate standards associated with the outcomes of education and training for those with learning difficulties.

The SCQF also publishes guidelines on the Recognition of Prior Learning. These state the following principles:

- recognition is given for learning, not for experience alone;
- the learning that is recognised should be transferable;
- SCQF credit points awarded as a result of RPL are of the same value as credit gained through other formal learning (SCQF 2009, p.98).

The SCQF distinguishes different types of outcomes of RPL, not all of which result in the award of SCQF credit points. Where credit points are awarded they may be used to:

- gain entry to the first level of a programme at a college or HEI;
- enable advanced entry to a programme of study at a college, HEI or other learning and training provider (SCQF 2009a, p.72).

To summarise: In Scottish VET, and in the Scottish education and training system more broadly, credit is a tool in the management of learning and in the design and planning of programmes. This is probably more important than its use as a tool for the recognition of learning or for credit transfer. The system is based on credit accumulation more than it is based on credit transfer. e elaborate this distinction, which we made in our background report and which informed the design of the Scottish study, in the following section.

SECTION 2: THE STUDY

Introduction

This research was conducted as part of a four-country study of Credit Systems in Lifelong learning. The study was coordinated by the German Federal Institute for Vocational Education and Training (BIBB) and covered developments in credit in relation to VET in Denmark, Germany, The Netherlands and Scotland. The study focused on specific interfaces over which credit transfer might take place. The precise definition of interfaces has varied across countries and over the course of the project. In this report we focus on three interfaces, respectively: between prior learning (including general education and pre-vocational programmes) and 'mainstream' VET; within mainstream ET; and from VET to higher education (which we have defined to include the interface between college-based HNC/HNDs and university degrees).

In the first phase of the project each national team prepared a Background Report, based on a common template which had been discussed and agreed by project members. This was followed by a meeting of team members, which compared the reports and identified issues to be explored in the second phase, through interviews with key informants from different parts of the system. A further

meeting was held among members of all country teams in order to compare findings from the interviews and agree a strategy for reporting. It was agreed that each country would prepare a report which synthesised the findings of the interviews as well as the contextual material, and further research evidence, that had been presented in the Background Report. A common template for country reports was adopted, and this report has been prepared according to that format.

Background Report

The Background Report for Scotland (Raffe, Howieson and Hart 2010b) described the VET system in Scotland and outlined the development of arrangements for credit, most importantly in the form of the SCQF. e have drawn extensively on it in the previous section. It identified key interfaces and reviewed the evidence on progression and transfer across them, and the role of credit in this process. It also discussed conceptual issues as well as some of the practical challenges and issues facing the system. It identified themes to be explored in the interview phase and suggested how they might be pursued.

The Background Report identified issues which we summarise as the paradox of Scottish education and training, although we did not use this term in the Report. The paradox may be stated as follows. On paper, Scotland has a credit-based lifelong learning system which is widely seen to be one of the most flexible in the world; but there is relatively little credit transfer to be observed, in practice, in Scotland.

The Report offered two explanations for this paradox:

1. The first explanation concerns the nature of programmes and qualifications within the system. Much of it is based on relatively short (mainly one-year) programmes, with progression between programmes 'built in' to their design. Entry to programmes and movement between them is flexible, at least with respect to formal requirements. Many programmes can be taken at a faster or slower pace, so learners with relevant prior experience can cover the programme more quickly. In other words, many of the benefits of flexibility are achieved by the way in which learners enter and move between programmes, or progress within them, without the need for more formal processes of credit recognition and transfer. Modern Apprenticeships and university degrees are longer than most other programmes (typically three or four years, although some Modern Apprenticeships are much shorter) but they are designed in a way that should permit credit transfer. They are therefore the exceptions, where we might expect to find most credit transfer in practice, and we pay particular attention to them in this report.

2. The second explanation is that the system provides opportunities for credit transfer, and structures and a language to facilitate it, but it does not mandate their use. The SCQF is voluntary, and education providers vary in their willingness to recognise and transfer credit at the interfaces which they control. Early research on the Action Plan distinguished between the 'intrinsic logic' of a qualifications system, which may favour credit accumulation and transfer, and the 'institutional logic' of its context. The institutional logic includes the factors which shape individuals' choices and opportunities for moving through learning and the labour market, institutional practices and the broader processes of educational and occupational selection which may inhibit the demand for credit transfer or the recognition of credit in practice. Not only may institutional logics provide barriers to credit transfer, but they may vary across sectors of education and training and thereby make it hard to design a comprehensive framework which is sensitive to these multiple logics. The tension between intrinsic and institutional logics has been a leitmotiv of the development of credit arrangements in Scotland.

Focus of interviews

We therefore proposed that the interviews in phase 2 should focus in particular on two themes:

- The use of credit transfer in practice, in relation to the three interfaces; the factors which facilitate or inhibit this use; issues that arise;

- Initiatives to promote the use of the credit framework and to develop new uses, in particular by changing the institutional logics of the relevant sectors of ET. These initiatives include schemes for the recognition of prior learning, the development of collaboration between institutions on either side of a relevant interface, and the construction of new pathways based on the accumulation of credit and its possible transfer between institutional settings.

Criteria for selecting interviewees

We aimed to select interviewees who, individually or taken as a group:

- had the ability to cover these two themes. Typically, this required us to interview individuals who had an overview of part of the system (eg those with policy responsibilities, with a role in qualifications provision, or representing providers or stakeholders in a particular field or sector) or who were themselves providers or who were at the 'cutting edge' of new initiatives;

- would cover all three interfaces; in practice most individual interviewees could comment on at least two interfaces.

- would cover a range of types of VET (eg college- and work-based) across a number of occupational sectors with a focus on construction, engineering and social services as sectors that appeared to be active in relation to credit-related initiatives.

The interview process

We carried out 24 interviews involving 27 individuals between September 2010 and August 2011. Fourteen of the interviews were conducted face-to face (mainly in the interviewee's office/premises) and the other 10 by telephone. It was agreed with individuals that the name of their organisation would appear in the project report but that they would not be named. Annex 1 lists the organisations involved; in several cases more than one member of staff form the organisation was interviewed.

At the beginning of the interview, after an introduction about the project, interviewees were given the following definition of credit and credit transfer that was being used in the project:

> *"procedures enabling the recognition and crediting of evidenced / proven learning outcomes in order to ease access and transition within the qualification system and/or to shorten the duration of training".*

The interviews were semi-structured based on a common interview guide that allowed sufficient scope to tailor the interview to the relevant interfaces(s) and remit of the individual concerned (see Annex 2).

The duration of the interviews ranged from 35 minutes to three hours but more commonly lasted between one and one and a half hours. The interviews were recorded with the permission of the individual(s) concerned and shortly afterwards written up: the intention at this stage was to produce a comprehensive account (including verbatim extracts from the recording) of the interview rather than an analysis. Subsequently each interview report was analysed and a thematic summary produced.

SECTION 3: TERMINOLOGY

In this section we consider definitions and understanding of the main terms used in connection with credit and credit transfer. We did not ask interviewees directly about their understanding of the different terms but report on their understanding and use (or not) of the terms during the course of the interview; where relevant we outline official definitions and comment on interviewees' understanding of them.

Credit transfer and recognition

In the Background Report for Scotland, we noted that arriving at a definition of the term 'credit transfer' that would be meaningful in the Scottish context as well as the other countries would be critical to the success of the interview phase of the project. However, as we have noted above, the Scottish system is largely credit-based, unitised and built around a combination of shorter and longer programmes that normally have credit accumulation and progression routes built into them. In this system a form of credit accumulation tends to be a normal or automatic process which requires no special arrangements and therefore has little visibility; a stronger notion of credit transfer would be seen as unnecessary or irrelevant in many contexts and would therefore have even less visibility. This was reflected in the interviews where we found that many interviewees, especially those not working at a policy level or in higher education, did not readily relate to or use the term 'credit transfer'; they were more likely to talk in terms of `progression' which might or might not include an element of credit transfer.

The terms 'recognise' and 'taking account of' were also used by interviewees in a non-technical way to refer to the process of gaining a picture of an individual's previous education, training and experience to help make decisions about level of entry to a programme or about the content of a training programme. This use of the term 'recognise' was different from how the term 'Recognition of Prior Learning' (RPL) was employed. As we noted above, the SCQF guidelines on the Recognition of Prior Learning set out the principles and the different types of outcomes of RPL, in particular, the difference between its use for a variety of formative purposes and its use in a summative way to achieve the award of SCQF Credit Points. While the SCQF guidance does refer to previous formal learning, the emphasis is on the recognition of informal or non-formal learning. SQA are developing their policy on RPL and this gives more attention to formal learning, including the recognition of formal qualifications (both old SQA qualifications and those of other awarding bodies) as well as informal and non-formal learning, reflecting SQA's needs as an awarding body.

For some interviewees, their focus was on the formative function of RPL in relation to individuals' prior experience at work and elsewhere; this seems to be where most of the development of RPL is happening, as we describe later in this report. For others, the summative function of RPL was more important. It was notable that several interviewees from the labour market side referred not to 'RPL' but to 'APL' that is the Accreditation of Prior Learning. APL or APEL (the Accreditation of Prior Experiential Learning) was the term generally used from the late 1980s until the mid 2000s when the main outcome of the process was expected to be either entry to, or credit within formal programmes or qualifications. Following an SCQF consultation and review, the developmental role of RPL was given greater focus with the use of the term 'RPL' adopted to reflect its formative as well as summative role (Whittaker 2011). In using 'APL' rather then 'RPL' these interviewees were indicating their interest in RPL was in respect of the award of a formal qualification or credit.

Permeability and flexibility

The term 'permeability' was simply not used by interviewees. 'Flexibility', on the other hand, was used extensively: the term has been part of the education and training discourse in Scotland for many years and the concept of flexibility (while often left undefined) is regarded as integral to, and as one of the most positive features, of the Scottish system. No-one in Scotland would wish to be

seen as inflexible or for their provision to be viewed as such. Interviewees used the term in a variety of ways: in discussing the way in which the Scottish education and training system enables individuals to move flexibly up, down and across different sub-systems within it; to refer to the flexibility of entry points depending on an individuals' previous experience; in relation to the flexibility of programme delivery eg the increasing emphasis on e-learning and workplace delivery or the flexible timing of assessment at college or in the workplace; and in respect of the flexibility to combine different types of provision (such as PDAs with HNs, or for school pupils to take HN units alongside Highers).

Learning outcomes

We described earlier how all qualifications or learning programmes in the SCQF must be based on learning outcomes. The SCQF, like the EQF, defines learning outcomes as 'statements of what a learner knows, understands and is able to do on completion of a learning process, which are defined in terms of knowledge, skills and competences' (SCQF 2009, p.8). Its concept of learning outcome is 'loose' in at least three respects: it embraces a wide range of types of learning outcomes; it does not treat learning outcomes as a sufficient basis for describing learning or the qualification based on it, instead, other types of information (such as 'professional judgement' or familiarity with learning programmes) are required to interpret statements of learning outcomes; and relatedly, the SCQF accommodates a variety of different concepts of learning outcome within its sub-frameworks.

SQA uses learning outcomes of all kinds in its National and Higher National qualifications. Depending on the area and level of learning outcomes may refer to demonstrations of knowledge and understanding, the ability to use generic cognitive skills, the ability to use occupationally specific practical skills, or the capability to demonstrate a range of what are sometimes called *behaviours* or *personal competences* such as leadership and initiative.

SVQs are based on relatively a 'tight' concept of learning outcome, called elements of competence, which define national occupational standards. Since 1996 the bodies which develop these standards and those which award SVQs have had freedom to use a variety of formats, although most retain the broad outline of the original format which consists of:

- units of competence, expressed as outcomes and which describe a substantial work role;
- elements of competence within each unit, which describe, in outcomes, the sub activities of the work role;
- performance criteria attached to each element of competence, which describe the successful outcomes of performance;
- a range statement, setting out variations to be covered by the element (there is considerable variation in the adoption of this component); and
- the essential knowledge and understanding required to meet the standard.

The interviewees were familiar with the concept of learning outcomes, how this differed across the sub-systems in the SCQF and the consequences for credit and credit transfer. For example, interviewees in FE referred to the role of professional judgment when assessing how much credit it would be appropriate to allocate to a candidate for his/her previous education or training, recognising the need to go beyond simply the specified outcomes of the previous learning. In discussing the difficulty of credit transfer between SVQs and NCs or HNs, interviewees referred to the differences between the SVQ and NC and HN concepts of learning outcomes and how these impacted on the possibility of credit. In discussions with interviewees from the labour market side, it was apparent that while they recognised that the minimum timescales set out for some Modern Apprenticeships might be seen as at odds with the outcomes based nature of SVQs, that at least a partial justification for this related to their understanding that the concept of learning outcomes includes the essential knowledge and

understanding to meet the required standard and that this can take time to acquire. (It should also be acknowledged that fears about dilution and traditional attitudes were among other factors.)

Vocational learning, skills and occupational competence

Vocational education and training (VET) provision in Scotland is very varied and there is no clear boundary between what is defined as VET and general education. The Scottish Government's skills strategy document identifies several overlapping clusters of skills, including core skills, employability skills, essential skills and vocational skills which it defines as skills 'that are specific to a particular occupation or sector' (Scottish Government 2007, p8). However, there is no agreed or consistent understanding of the term 'vocational' and it is applied to a wider range of types of learning. In the Background Report we suggested that it may be helpful to think of Scottish VET as a continuum including:

- provision to develop full workplace *competence* in specific occupational roles (eg Modern Apprenticeships and training leading to SVQs) ;
- provision to develop *capability*, but not full workplace competence, in occupational areas (eg many college-based programmes leading to National Qualifications); and
- *pre-vocational* learning - this includes learning that is not related to a particular occupational area (such as enterprise education) and learning that may take place in an occupational context but whose main outcomes are defined in generic terms (such as the 'employability skills' developed by Skills for Work courses for school-age pupils).

The perceptions and views expressed by the interviewees about different courses and programmes could, in fact, largely be understood in relation to this continuum. Interviewees saw the outcomes of courses or programmes taken by school pupils such as Skills for Work as being about the development of employability skills and pupils' understanding of the demands of the particular occupational sector as well as demonstrating their interest in the occupational sector. It was clear that none of the interviewees perceived full-time provision in either FE or HE as delivering full workplace competence; even where students completed work placements these were not viewed as enabling students to achieve vocational competencies. This was reflected in comments that HN and degree graduates were not 'job ready' when they completed their course and would not be fully competent until they had been in the workplace for some time. Indeed, the statements of several interviewees from the labour market side suggest that they did not think that some full-time NC courses at college could really be considered fully vocational and, if asked, might have been more likely to locate them towards the pre-vocational end of the continuum than to the opposite end. For interviewees, Modern Apprenticeships were clearly located at the end of the continuum relating to provision that develops full workplace competence in specific occupational roles. The term 'occupational competence' was very commonly used in discussing MAs. SVQs were also thought of in this way by interviewees.

Core skills are the five generic skills of communication, numeracy, information and communications technology, working with others and problem-solving. They may be delivered in discrete units or 'embedded' in learning with a more specific focus. They are a required component of many vocational programmes including Modern Apprenticeships, although the particular core skills level and the level at which they are required may vary. The concept of core skills was widely recognised among our interviewees, and perceived to be important in relation to access and progression.

SECTION 4: PROCEDURES

Political context

In Section 1 we outlined the series of reforms which led to the SCQF and to a qualifications system which, at least on paper, provides considerable scope for learners to move flexibly through the system and in doing so to accumulate and, where appropriate, transfer credit. The structures and language of credit are embedded in the mainstream system, although their use in practice is often at the discretion of providers or other stakeholders. Current policy efforts therefore focus on promoting their use, and on extending them to non-mainstream learning. This focus is reflected in the sections that follow, which describe, in relation to each interface, the current practical use of credit transfer and current 'initiatives' to extend this use or to create new structures within which transfer might take place.

Our discussion is based largely on our interview data since, as we noted in the Background Report, there is a relative lack of data on the topic. While the SCQF Partnership has created a central database of opportunities registered on the SCQF, there is still no central record of learners and the use that they make of these opportunities. This reflects the voluntary nature of the SCQF and its character as a meta-framework. Most data are collected and held by individual awarding bodies, who do not routinely report the number or proportion of awards that involve recognition of credit from elsewhere, or that give credit for prior learning in admitting students. Relatively few studies of credit transfer have been carried out, and these have tended to look at *opportunities* for credit transfer, or the way these opportunities are designed and implemented, rather than *their use* by learners. Other studies have focused on the impact of specific policies or measures rather than the overall impact and use of credit arrangements. Moreover, studies to date have focused on the interface between Higher National qualifications and university degrees with little, if any, attention to credit transfer from general education into vocational education and training or credit transfer within mainstream vocational education and training. In addition, as we have already highlighted, discussion of the practical use of credit transfer in the Scottish system is problematic because of the way credit is used within the Scottish system - the type of flexibility that may be achieved by credit *transfer* in other systems may be achieved in Scotland through credit *accumulation* and more generally through the interconnectedness of qualifications in the SQA portfolio and in the SCQF. Credit in Scotland serves multiple uses, of which credit transfer is arguably not the most important.

Drivers. In section 1 we noted that current developments in credit were influenced by four main policy drivers, which we summarised under the headings:

- developing skills for economic growth and competitiveness;
- post-16 participation;
- widening access; and
- efficient, flexible learner journeys.

Our interviewees broadly endorsed this judgement, although they tended to mention cost-effectiveness and lifelong learning (making the system more learner-centred) as additional drivers, and fewer mentioned post-16 participation. Most perceived the skills agenda to be increasingly dominant. Some drew attention to negative consequences of current policies, in particular the cuts in public funding and the changed priorities that these reflected. This included, for example, a reduction in the funding for colleges' work with schools.

Interface 1: from prior learning into mainstream VET

This interface relates to transitions into mainstream VET at college (mainly NC and HN programmes) and into work-based training in the form of Modern Apprenticeships (which are usually based on SVQs, sometimes with the addition of NCs or HNs). These transitions include transitions from gen-

eral education in secondary schools, although we would most expect to see credit to be transferred from pre-vocational courses for school pupils such as the Skills for Work which are certificated as National Qualifications by the SQA; they also include transitions from pre-apprenticeship programmes and from training programmes for young people at risk of exclusion such as Get Ready for Work.

The qualifications reforms which led to the SCQF (especially the Action Plan and Higher Still) introduced a common architecture for qualifications for general, prevocational and vocational learning in schools and colleges. This is now embodied in the National Qualifications framework of units, courses and group awards. In principle it is possible to transfer credit from units or courses taken at school to college programmes, and from smaller awards such as Skills for Work courses or National Progression Awards to larger National Certificate awards. Not only does the qualifications structure thus provide opportunities for credit transfer, but this is potentially becoming more important with current attempts to expand pre-vocational learning in schools, to promote collaboration between schools and colleges, to expand the role of informal and non-formal learning in catering for the post-16 age group and to ensure that the range of opportunities is better coordinated so that it meets the needs of the client group and provides clearer progression routes. The OECD (2007) report which advocated broader curricular provision, including more prevocational learning, drew heavily on the Australian experience. The attractiveness of Australian VET-in-school courses is claimed to rest on the way they are based on occupational standards and offer 'authentic' vocational learning with the potential for credit transfer into the mainstream VET (TAFE) sector.

This interface also includes transitions of potentially at-risk adults on training programmes as well as transitions from Community Learning and Development and other types of non-formal and informal learning. We have considered these other transitions primarily in relation to the recognition of prior learning (RPL). Those currently in work and with considerable employment experience but who have not previously undertaken formal VET are also included in this interface in relation to RPL. However, as we see below, RPL as practised in Scotland is often only loosely associated with credit transfer. We therefore discuss the interface between pre-vocational or general education separately from RPL; we discuss each first in relation to current practice and then in relation to new initiatives.

Credit transfer between general/pre-vocational education and mainstream VET: current practice

There is little credit transfer across this interface. The potential for credit transfer from pre-vocational education into mainstream VET was generally seen as very limited since pre- vocational provision centres on the development of employability skills rather than on vocational skills; even in programmes where participants covered a range of craft skills, the focus was on doing so as a vehicle for employability skills rather than the craft skills as such. The main benefit of pre-vocational provision was perceived as improved access to initial VET; this was the common view across all the interviews that covered this interface. Participation in pre-vocational provision was seen as improving participants' knowledge of the sector which they could then demonstrate in their applications and at interview; as indicating to the recruiter that the applicant had a genuine interest in the sector and had good employability skills: *'it's an indication that they're interested and that having experienced the area they've decided it's what they want to do… they actually know what's involved.'* Most interviewees also thought that the experience gained in a pre-vocational programme would enable participants to perform better in the selection tests that were generally used as part of the Modern Apprenticeship recruitment process.

Credit transfer from pre-vocational education into Modern Apprenticeships, which mainly offer SVQs, or onto college provision that deliver SVQs, was seen as especially unlikely since SVQs are based on National Occupational Standards while pre-vocational provision is not. Moreover, interviewees emphasised that candidates for SVQs must demonstrate competence in the workplace over a substantial period of time but most pre-vocational programmes only offer short periods of work experience. One interviewee did think that there might be some possibility of more recognition of

Skills for Work courses since they are linked to National Occupational Standards (although the qualifications awarded are National Qualifications) but discussions about this are at a very early stage and no other interviewee saw any significant credit transfer from pre-vocational provision as a possibility. It was noted that, for example, in the Construction sector about 20% of apprentices starting a Modern Apprenticeship had been on a Modern Apprenticeships Construction course but that they would not have received any credit for this.

A recent study of programmes to provide opportunities for young people at risk of becoming NEET noted that some of these programmes provided articulation to Modern Apprenticeships, training and employment programmes, but the report made no mention of credit transfer (Lowden *et al*. 2009). It concluded that effective provision offered 'appropriate assessment to recognise learners' achievements and provide nationally recognised qualifications to provide credible accreditation for young people', and that promoting progression and positive transitions and destinations was 'extremely important', along with other features of the process, content and organisation of learning and the relevant support. However, there is no suggestion in the report either that credit transfer is a necessary component of effective practice or that it was available in the programmes studied.

Core skills. The one aspect where an element of credit transfer occurred was in respect of transfer of core skills both to full-time courses and to Modern Apprenticeships. Interviewees noted that if someone can show evidence that they already have any of the core skills they would not be expected to take it again, for example, in the case of Modern Apprenticeships, one interviewee described the process whereby the SVQ Assessor would go through the core skill profile on the SQA website to see which core skills the candidate had achieved at school and cross-match it to the core skills in the Modern Apprenticeship Framework. But this interviewee also made the point that in her experience, the core skills that school leavers are credited with will usually have been achieved in their general subjects at school not in a pre-vocational programme. From the evidence of the interviewees, the outcome of such credit is that it enables the person to enhance his/her course or Modern Apprenticeship rather than to shorten it since s/he would be expected to take the core skill at a higher level or replace it with some other element relevant to his/her training.

Level of entry. Another benefit, in some cases, is that pre-vocational learning can enable an individual to enter a college course at a higher level than would otherwise have been the case, effectively saving up to a year. This seemed most likely in college courses which had no formal entry qualifications but where the decision about the level at which an applicant should enter (eg SVQ2 rather than SVQ1 Hospitality) depended on a judgement about their motivation, focus and level of commitment to a career in the particular industry.

Faster progression. Many Scottish VET programmes offer the flexibility to undertake assessment when the candidate and assessor think it is appropriate. A number of interviewees suggested that the knowledge base that learners gained from pre-vocational courses could therefore enable them to progress through their training more quickly. However, it should be noted that some Modern Apprenticeships have a specified a minimum timescale for completion which limits the extent to which they can be taken more quickly. Several interviewees did not share the view that pre- vocational learning enabled faster progress: in their experience the learner's academic level at school was the best predictor of the speed at which they would complete their training. Part of the explanation for these different experiences and opinions may relate to the occupational sector in question.

Repetition of learning. In their review of unitisation, Hart and Howieson (2004) note that the recognition of prior certificated learning was an issue within the unitised system; particularly in the early days of National Certificate modules, it was common for college students to have to repeat units they had already covered at school. More recently, a report on Modern Apprenticeship and Skillseekers noted that core skills taken at school were sometimes not being recognised so that some learners

had to repeat this as part of their Modern Apprenticeship (Cambridge Consultants 2007). There was some evidence of such repetition from the interviews conducted as part of this study. Several interviewees recounted instances where individuals had been required to repeat NC units they had already successfully taken at school on their subsequent college course. This appeared to be related to timetabling and resource considerations; the college found it too difficult or too expensive to provide alternative options. Other interviewees gave examples of training providers who did not accept SVQ units taken as part of a school-college pre-apprenticeship programme but required apprentices to undergo some training and to re-take the assessment. In this case the issue was one of trust: the training providers did not trust the training and assessment that had been carried out at college. The consequence of this lack of trust is somewhat ironic. If training providers recruited young people who had been on the pre- apprenticeship programme then government funding for them would be reduced on the basis that they already had some of the necessary SVQ units, but the training providers still incurred the costs since they believed that they had to provide the re-training and re-assessment.

Credit transfer between general/pre-vocational education and mainstream VET: initiatives

Several school-college partnerships have been created to deliver HN units to school pupils with progression to full-time HN programmes at college afterwards. These initiatives have been stimulated by the Regional Articulation Hub, but its funding to support colleges' work with schools has been cut, so one of the projects will not continue. One initiative that is continuing involves a college and a local school which have developed two clusters of HN units (a Social Science Cluster and a Digital Media cluster). Successful completion will count towards the entry requirements for the full HNC/D at the college; students will not repeat these units and will instead either undertake a research project or an industrial placement. Completion of the HN units will not shorten the full-time HN course but will give students the opportunity to enhance it as well as improving their chances of being accepted onto it.

Recognition of prior learning: current practice

A review of RPL in Scotland in 2008 identified examples of good practice but found that it was not consistently accessible or delivered across areas, industry sectors or sectors of education and training (Inspire Scotland 2008). Similarly, a scoping exercise on RPL for refugee groups and migrant workers found a considerable level of activity by different organisations but identified a need for better signposting and greater accessibility, and put forward options for a Recognition Centre to the Scottish Government (Guest and Vecchia 2010).

This study suggests that RPL in Scotland is used more as a formative tool (including as a step in the process of gaining formal certification) than as a means of formal accreditation. However, the SQA is developing its policy and guidance on RPL with an emphasis on its summative purposes and on the accreditation of formal learning (including certification from other awarding bodies) which may in the future increase its use for formal accreditation.

Interviewees identified a number of barriers or disincentives for using RPL for formal certification: cost issues; the perceived complexity of the process including quality assurance demands; uncertainty about its value and currency; and the alternative offered by SVQs. In terms of cost, for example, colleges make a charge for undertaking RPL for the experience or units in question and mapping them to SQA units. SQA also charge a fee to award and certificate the units that have been recognised in this way. Consequently RPL might not save the individual any money although it might save him/her time.

In VET that offers SVQs, the SVQ design based on learning outcomes with the possibility for candidates to take the assessment without having to undertake any training diminishes the need to go through a formal RPL process for certification purposes: '*why do RPL when you've got the VQ there*?'.

College staff described how if someone came in with relevant prior experience they would look at the assessment for each SVQ unit and establish, in discussion with the student, where they could '*go straight to the assessment'* and where they might need to take relevant classes.

Recognition of prior learning: initiatives

The Social Services sector, led by the Scottish Social Services Sector Council (SSSC), has been at the forefront of the development of RPL processes within the context of the SCQF to support workforce development: '*the Social Services RPL has led the way in the post SCQF world of RPL'*. The SSSC in partnership with the SCQF Partnership supported the development and piloting of an *SCQF RPL pack and profiling tool*. This initiative was prompted by the need to enable unqualified care workers to gain the qualifications (SVQ 3) that are now required for registration purposes. It was recognised that many of the care workers lacked confidence and were reluctant to undertake the SVQ so the focus of the RPL pilot was on the formative process: building staff's confidence and helping to develop the reflective skills they would need to be able to provide the evidence for their SVQs. The aim was not to shorten the time to achieve the SVQ3 but about '*smoothing the process'* and '*getting [the care worker]to the stage that they're up and running, ready to 'really 'go' for the SVQ'.* The evaluation of the project with learners and mentors/assessors was largely positive and the model has been extended to other SVQ levels. Several interviewees reported that the model and resource pack have been taken up and used by employers for different aspects of workforce development including recruitment and induction as well as continuous professional development although not under the banner of RPL.

While some interviewees were extremely positive about the SSSC model, they also thought that most employers were still to be convinced of the benefits of RPL as a cost effective way to build a trained workforce although at the level of sector skills councils there is support for it. Moreover, not all interviewees were positive about the SSSC model. One college-based interviewee noted that while the SSSC had '*done a good job… RPL is inherently complex*'. Students still found the process complicated and it demanded a high level of reflection, critical thinking and communication - the very abilities that many of those who wanted recognition for their practical experience did not have. It is also a demanding process for the college. Nevertheless, there has been much interest in the SSSC RPL model and resources and the SCQF Partnership has subsequently developed a generic RPL Toolkit heavily based on it for other organisations or sectors to adapt and contextualise for their own use.

Another initiative is the development of an *RPL Profiling Tool and SCQF benchmarking guide* piloted in 2008-09 for Skills Development Scotland. This was designed for school pupils, especially those at risk of not achieving a positive post-school destination. The intention was to help them map and benchmark their learning and skills from their wider out-of-school activities against the SCQF; this would enable them to recognise and articulate their skills and experience to support applications and help them assess the type and level of further education and training to which they might progress. The pilot evaluations highlighted the challenges of producing accessible materials that pupils as well as careers advisers could understand and use; this required simplification of the SCQF level descriptors and greater exemplification of the levels. The pilot also demonstrated the time-intensive nature of the process. Another issue, perhaps especially relevant to this target group, was that where some pupils could not identify an experience to use in the benchmarking element of the process this could result in a negative rather than a positive outcome. Careers Advisers were concerned about the currency of the outcomes especially since the process was being undertaken without a specific end-user in mind. A parallel project was undertaken to develop another version of the RPL profiling tool and guidelines for use with redundant workers. It is not clear whether these pilots will be further developed for mainstream use.

Interface 2: within mainstream VET

In this interface we focus on transitions between full-time VET typically delivered in colleges (often leading to NC group awards) and work-based VET that is often delivered in Modern Apprenticeships, based on national occupational standards and certificated at least partly by competence-based SVQs. We also consider transitions between different Modern Apprenticeships and between different qualifications, especially those awarded by different bodies.

Credit transfer within mainstream VET: current practice

Limited credit transfer. While all those interviewed about credit transfer within this interface were clear that in principle no-one should have to repeat learning already completed and of which they could provide evidence, it was apparent that credit transfer across this interface is limited. This applies to credit transfer between full-time VET programmes at college to work-based Modern Apprenticeships and also between Modern Apprenticeships. Indeed, the majority of interviewees who commented on this interface did not perceive a significant level of credit transfer as possible because of the need to develop skill sets within a specific occupational context and the competence based nature of SVQs, the main qualification undertaken in work-based training. While the funding arrangements for Modern Apprenticeships are an incentive in principle for credit transfer (Skills Development Scotland will not fund training already completed), the possibility of doing so is limited by a number of factors.

Transfer between full-time college-based provision and Modern Apprenticeships is limited in particular by the content and assessment of the SVQ element of the Modern Apprenticeship. One interviewee summed this up: *'The key to credit is being able to demonstrate occupational competence'* and this requires *'capturing the evidence against occupational standards, in a real job in a real workplace and demonstrating the competence over a period of time not just on one occasion'*. These requirements therefore rule out credit from college-based qualifications for the SVQ element of Modern Apprenticeships. The fact that it is not possible to give credit for part of a unit further limits the possibility of credit; '*they may have touched on parts of the unit [in their NC] but not sufficiently so that it can be signed off'*.

Modern Apprenticeships vary in the extent to which their Framework specification offers the potential for credit transfer. If the Framework specifies an education (college-based) component, as for example in Engineering and Construction, then the apprentice may be able to gain credit for this component if they already have an appropriate award. In this case it may save the individual some time, perhaps around 2-3 months of the Modern Apprenticeships but it appears that instead of shortening the Modern Apprenticeship, more commonly they take the education component at a higher level. In Modern Apprenticeships without an education component the potential for credit transfer is more limited. Moreover, the duration of Modern Apprenticeships vary so that in the shorter one lasting perhaps six months or so, then there is less incentive to seek or to award credit.

The other aspect of Modern Apprenticeships where credit transfer from college-based provision may be possible is the core skills component and other generic units in areas such as health and safety. Nevertheless, even for these types of skills it seems that the issue of occupational context can still limit transfer. One interviewee suggested that in the development of core skill units, awarding bodies have given too much weight to context rather than focus on the core skills themselves. Several interviewees, however, pointed out that the transfer of credit for a generic unit between different Modern Apprenticeships cannot be assumed, that the occupational standards for generic units such as health and safety or customer service can differ between Modern Apprenticeships in terms of the work environment and the industry specifics: '*you can't take these generic units at face value*'. For example, although Health and Safety is a generic unit, it will need to be covered in greater depth in Hospitality than in Retail but in even more depth in Childcare than in Hospitality.

The completion of a full-time college course in a relevant area was perceived to improve individuals' chances of gaining an apprenticeship; it might also enable them to complete certain aspects of the Modern Apprenticeship more quickly and/or be 'fast-tracked' to the SVQ assessment. This also applies to those entering a Modern Apprenticeship with relevant industrial experience: interviewees generally thought that while it was difficult to allocate formal credit for this to an SVQ because the experience was unlikely to map over *fully* to the complete SVQ unit, such apprentices would generally require less formal training and would undertake the assessments more quickly. The possibility of fast-tracking to the assessment seemed to undercut the alternative approach of undertaking RPL to credit industrial experience. RPL or APL (as more usually referred to in mainstream VET interviews) was regarded by those who commented on it at this interface as difficult, costly and possibly lacking real currency. Furthermore, the awarding bodies were perceived as lacking the industrial knowledge to make an appropriate judgement and as being reluctant to accept RPL evidence towards unit achievement in a context of nervousness about standards.

The currency of the skills and experience was identified as another issue that could limit transfer: '*how up to date is someone's skills when they're looking for credit transfer?*' This was reported to be an increasing problem with regard to redundant workers but also applies more generally. Job roles change, occupational standards have a limited 'shelf-life' and Modern Apprenticeship Frameworks are revised with additional units being added constantly. Given this fast rate of change, it can be easier for employers to assess the person against the full and *current* occupational standards than seek to give them credit for the previous learning and they may be advised by Skills Development Scotland to do so.

There appeared to be less movement from work-based Modern Apprenticeships to full-time college based VET. In the few examples we encountered in this study, it seemed to the case that where there was an appropriate SVQ (eg in child development) then the FE staff would credit this to the corresponding NC or HNC unit, exercising their professional discretion and perhaps requiring the student to undertake some additional work.

Credit transfer between Modern Apprenticeships. The interviews indicate that movement and thus the demand for credit transfer between different Modern Apprenticeships is not common. If someone does comes in from a different Modern Apprenticeship, then any unit that has been fully completed and signed off and which maps over *completely* to all the standards of the relevant unit will be given credit. But only small numbers move from one Framework to another; instead the interviewees noted that movement is usually within a Framework, for example to a different pathway within Engineering, often because the person has changed employers. Transfer to a different pathway within a Modern Apprenticeship Framework is most likely to happen at the end of the first year before the more specialised training takes place; at this Foundation level stage (SVQ level 2) there are likely to be some common units and apprentices would be exempted from any units they have already completed. While it is still possible to transfer after first year, this is more difficult but we were told there is very little demand for this. Redundant apprentices generally stay within their craft area and start from the point they left off without any repetition.

Where apprentices change pathways within a Modern Apprenticeship Framework, the procedure is usually for the new training provider to examine the apprentice's portfolio and check with the previous training provider and /or SQA that it has been properly assessed, verified and signed off and then the individual will be credited with the unit. Since SDS will not pay for training already funded in the same occupational area, it is clearly in the training provider's interest to ensure credit is given for completed units.

But the extent to which credit transfer is possible within a Modern Apprenticeship Framework appears to vary across occupational areas' For example, it seems that there is less credit transfer across

the different Construction trades, that while there are some transferable units between some of the main crafts, the design of the Modern Apprenticeship means that in practice apprentices who transfer pathways within Construction have to start again at the beginning.

Minimum time requirements. There is a limit to the extent to which some Modern Apprenticeships can be shortened through credit and exemptions because the particular Framework includes a minimum time scale for completion. While VET in Scotland has moved from a time-serving basis to a competence-based system, in some of the traditional Modern Apprenticeships, achieving occupational competence is seen as requiring a certain length of training. In Engineering, for example, the SSC sets minimum timescales for completion of the various Modern Apprenticeships within the sector (typically 3-3.5 years) although it stresses that this is only a guide and that some apprentices may be able to complete their Modern Apprenticeship faster. They would, however, look closely at applications for completion of the Modern Apprenticeship that were significantly outside the normal duration.

The Construction industry, in particular, appears to give considerable weight to the time element (at least at craft level) and apprentices must also take a separate Skills Test at the end of the Modern Apprenticeship; this was seen by several interviewees as an anachronism and that greater flexibility to vary the duration of the Modern Apprenticeship is required. In the non-traditional Modern Apprenticeship Frameworks apprentices can go through at a different pace and length of time depending on their job role and ability but even here some Sector Skills Councils have recently started to specify minimum times (6-9 months) because of concerns and criticisms of low standards.

Since the beginning of 2010, all new or revised Modern Apprenticeship Frameworks submitted to the Modern Apprenticeship Group (MAG) for approval must have all components, where possible, credit-rated and levelled against the SCQF. The aim is that in the longer term this will increase the portability of Modern Apprenticeships and make the SCQF and the idea of transferability real for employers and workers. Clearly this development is at an early stage but opinion among those interviewed varied, several referred to it as a 'paper exercise' but another spoke of its positive impact on the apprentices he supervised: '*it lets them see where they can go on to, how they can drop in and out of the system and go on to degree if they want to … some are coming in thinking their career is limited, that doing an apprenticeship they're at quite a low level but then when they see where the MA is placed on SCQF they can see that they're actually at a reasonable level with VQ3 and that they can move across to other qualifications'.*

A related development is the recognition by MAG of a wider range of competence based qualifications in addition to SVQs within Modern Apprenticeships. This is part of the efforts to introduce greater flexibility into Modern Apprenticeships and improve their transferability, all of which may increase the amount of credit transfer in the future although the interviewees did not expect this to be extensive.

Credit transfer within mainstream VET: initiatives

A pilot accelerated apprenticeship for existing staff with relevant industrial experience has been developed by the engineering Sector Skills Council (Semta) in collaboration with two major employers and their respective colleges and with trade union consultation. This initiative arose from research that identified a need for the industry to train its existing unskilled and semi-skilled employees to meet future demand for skilled workers in a context of a decline in the number of school leavers.

The approach is to combine the relevant SVQ (Performing Engineering Operations) with the NC in Engineering against which it has been benchmarked. Rather than give exemptions for the candidates' industrial experience, they are accelerated through the SVQ assessment (since they do not need much training due to this experience) and the evidence that they generate for the SVQ is then used

to gain the NC award in addition to the SVQ. The mapping of the SVQ to the NC is not a complete perfect match; candidates still have to do some NC units because there are some units for which the SVQ does not provide evidence but with this approach the Modern Apprenticeship can be gained in around 18 months (around half of the usual time). RPL was considered but rejected on the grounds of cost, difficulty and doubt about the currency of the end award.

This is not an accelerated apprenticeship for adults generally; candidates must have relevant industrial experience and have the capacity to complete the apprenticeship.

Interface 3: from VET to higher education

In this interface we consider transitions between colleges' sub-degree provision (HNCs and HNDs) and degree-level provision (largely at university) although we would note that the implied labelling of college as 'vocational' and university degrees as 'non-vocational' is questionable. HNCs and HNDs (or HNs) are short-cycle HE programmes, one and two years respectively if studied full-time, which traditionally provided access to technician-level and lower-managerial occupations. They are placed at levels 7 and 8 of the SCQF and are equivalent to the first one or two years of a (four-year) Honours degree. This interface also includes transitions between Modern Apprenticeships/SVQs and degrees. SVQs at level 3 are assigned at SCQF level 6 or 7; and SVQs at level 4 are assigned at SCQF level 8 or 9, so in principle they are equivalent to the first or second year of an Honours degree.

In Scotland, this is the most important interface for credit transfer, it is where credit transfer is most visible and understood and where most credit transfer takes place, largely between HN programmes and university degrees. Attention is now, however, beginning to be directed to other possible credit transfer routes such as SVQs/MAs to degree and using school qualifications not only for entry to degree but also for credit with advanced entry to perhaps the second year of a degree. These developments are part of creating the '*flexible, efficient learner journeys'* that government policy envisages.

Credit transfer from HNs to degrees: current practice

In the academic year 2009-10 a total of 5,456 HN students went on to degree study. In terms of credit transfer, or articulation as it is more generally referred to in this interface, just under half of them articulated (2,595; 48%) entering second year if they had an HNC and third year if their qualification was an HND.

Articulation agreements. This use of HN qualifications to gain entry to, and frequently credit towards, degree study takes place largely in the context of partnerships between colleges and universities often in the form of articulation agreements of varying degrees of formality. In effect, such partnerships provide the basis whereby general credit may be guaranteed to become specific credit.

Such articulation agreements between colleges and universities have been in existence for a number of years and pre-date the SCQF but more recently, the SFC has sought not only to encourage the creation of more articulation routes but also to promote a greater degree of formality in the existing articulation agreements and to encourage institutions to provide more support for articulating students to ensure their transition from HN to degree study is successful. As part of this strategy, the SFC has funded five Regional Articulation Hubs, each based on a regional partnership of universities and colleges whose role is to work with these partners to develop articulation routes and support activities. It appears that the Articulation Hubs have helped to raise the profile of articulation, encouraged a more formal and structured approach and stimulated initiatives (see below).

Credit transfer from HN to degree is an accepted part of the landscape in Scotland but a number of studies have identified issues or barriers in practice (Maclennan *et al*. 2000; Knox and Massie 2005, 2007), many of which were echoed by our interviewees.

Credit is discretionary. In the first instance, recognition and the award of credit for HN qualifications is at the discretion of the receiving institution and in practice the more traditional universities have been reluctant to do so. The reasons include their position as 'selector' universities with their courses already heavily over-subscribed, lack of acceptance in principle of the equivalence of levels, and comparisons with traditional entry students. One interviewee summed up the view of some academic staff thus: *'why bother with articulating students…they struggle anyhow and don't want to do honours''*. In 2009-10, 80% of the HN students who articulated into second or third year were concentrated in four universities in Scotland, all of them 'new' universities.

Nevertheless, it should also be remembered that while government is strongly in favour of HN students articulating, that is entering the second or third year of a degree, some students chose not to do so for social and/or academic reasons (Howieson and Croxford 2011). Interviewees thought that this should continue to be possible although it may not be regarded as an 'efficient learner journey'.

Guaranteed places. University practice in relation to guaranteeing a certain number of places for articulating students appears to vary. For example, one university uses formal agreements which include a guarantee of the number of articulating students it will accept as an '*admissions device'* to enable them to specify conditions of entry and manage scarce places; another university has decided not to specify numbers being concerned that it would have to honour the stated number and thereby lose flexibility to take students from other routes. But the interviews also revealed that it is relatively common for colleges not to provide the university with the agreed number of articulating students even in high demand subject areas. This clearly causes considerable difficulty for the university that has planned on the basis of these numbers. The main reason for such a shortfall is that not enough of the HN students meet the necessary criteria to articulate by the end of their course reflecting, in part, the colleges' recruitment practices.

However, the increased demand for university places, and caps or cuts in the number of available places, have had an adverse effect on HN students wishing to articulate. Interviewees posed the question: '*what happens to widening access and articulation in a climate of limited resources?*' Many students who had entered their HNC/D two years previously in the expectation that they could later move into degree study were not able to do so. While universities struggled to maintain the number of articulating students because of the increased demand for places, they were under pressure from the SFC which believed that there was scope for them to improve their management of their different recruitment streams and to provide better protection for the articulation route. The SFC has recently adopted a set of core principles, which state that it is a condition of SFC funding for articulation that the university operates a system of guaranteed places. The preferred model involves guarantees to individual students, conditional on their HN outcomes, but other options include guarantees at the level of the course, the college or the university.
It was suggested in the interviews that the current difficult economic climate might see greater emphasis in articulation on degrees in which all students spend the first and second years taking HNDs delivered in college before progressing to years 3 and 4 in the university.

Not a standardised process. It was evident from the interviews that articulation activity across Scotland is not a standardised process following a common template. Articulation agreements are negotiated between an individual university and their partner colleges; within the university responsibility for articulation and articulation agreements lies with academic staff within Faculties/Schools which have a high level of autonomy in deciding on the articulation agreements they want (or not) and the nature and conditions set out in the articulation agreement although there may be some oversight at a university level and the agreement officially signed at a higher level. Thus articulation is dependent on the preferences and enthusiasm of individual Faculties, sometimes departments or even individuals within them so that practice is variable across Scotland and issues remain as to whether articulation is embedded in colleges' and universities' normal practice and processes. The

code of practice introduced by the SFC may establish more uniformity although it only covers articulation agreements directly funded by the SFC. The Scottish Government's (2011b) consultation on post-16 education notes that the lack of a 'consistent process adopted across further and higher education' is a barrier to articulation. It raises the possibility of legislation to create a statutory framework to guarantee articulation from college to university where there is a clear curricular fit.

Other issues highlighted in the interviews concerned the need to go beyond creating the formal agreement to establish close working relationships between academic staff in the university and colleges in the partnership for the agreement to succeed in practice. For example, when one institution reviews its provision, the implications for any articulation agreement should be automatically considered and staff in the other institution(s) involved.

Curricular and pedagogical differences between HN and degree. The need to address curricular and pedagogical differences between HN and degree provision is an acknowledged challenge in articulation. As interviewees noted, while the SCQF shows equivalences in the levels of HNC/Ds and degrees, this does not mean that programmes at the same level will automatically map: '*you can't leave it to chance that they will map across*'. As part of developing articulation agreements interviewees described the process of checking the HNC/D specification against the degree in question to check the curricular match and decide the credit to be given. It was thought that curricular mismatch could be largely dealt with through HN optional units and/or by requiring students to undertake some additional element such as academic writing skills. It could also on occasion be necessary to develop alternative degree provision where there was a known mismatch between existing degrees and HNs. It was pointed out that curricular (mis)match was not only an issue in terms of whether and how much credit an HN student may be awarded but it could also have a critical impact on his/her chances of success.

There is an underlying tension in relation to the issue of curricular fit because HNs have a dual role as entry qualifications to degree study and for employment. The question arises as to the extent to which it is possible to vary the content to achieve a better match with a degree programme without compromising the value of the HN in the labour market. The extent of this problem varies across HNs depending on where the HN the proportion of students aiming for each destination, what one interviewee referred to as 'the degree – employment destination continuum' (an allusion to a recent research study: Ingram and Gallacher 2011). Colleges' poor record in following-up students' destinations was a problem: '*when a new HN is being developed or an existing one revised…. [colleges] should be asking where do the majority of students go - is it mainly an HE or employment focused one or a real hybrid? - and should design in preparation for the next step*'.

The SFC's interest lies in the HNs that are primarily used for entry to degree rather than employment and it is now expecting to see greater planned curriculum in these HN subjects. It remains to be seen what impact a greater alignment of certain HNs with degree programmes might have on the value of these specific HNs when they are used in the labour market or on HNs in general. It is notable that most research on HNs has been concerned with their use in education. The question of whether HNs can maintain their integrity as dual qualification as the Articulation Hubs and institutions are encouraged to develop closer curricular fit with degrees was acknowledged in interviews as very much part of the agenda and questions for the next few years.

A recurring issue in relation to articulation and reflected in the interviews, is that while SCQF shows the formal level, in practice HN students are frequently not well prepared for degree study, especially in relation to their academic/study skills. This concern is reflected in the decision of universities, notably the older ones, not to recognise credit from many HN programmes because their methods of teaching and learning are not considered to prepare students adequately for continued degree study. There is a tension here between the different pedagogies in colleges and universities, especially giv-

en colleges mission to provide 'second chance' education, a related issue concerning how much colleges can, and should, alter their pedagogy to prepare only some students for degree study. One response has been for colleges and universities to develop additional preparatory resources and activities for articulating students to use (with varying levels of take-up).

In interview it was suggested that to make articulation work in practice, there is a need to go beyond the current formal articulation agreements and to recognise that a much stronger relationship between the respective course leaders in the college and university and more regular interaction of college and university staff is required. It was pointed out, for example, that staff in some colleges do not routinely receive information about the progress of their former students in their degree studies. Examples given of greater collaboration to overcome pedagogical difference included joint planning of HN students' project work and involvement of university staff in the HN assessment team to ensure students are introduced to university style assessment.

Credit transfer from other VET to degrees: current practice

At an early stage. There is much less credit transfer from other VET programmes into degrees, in particular from Modern Apprenticeships using the SVQ qualifications gained. It is, however, an articulation route that the Articulation Hubs are now beginning to explore as we describe below under 'initiatives'. This is seen as a response to declining school populations and the need to look towards older potential entrants, as part of developing the 'efficient learner journeys' desired by government and as pursuing the logic of SCQF. The mapping and crediting rating of SVQs to the SCQF and the creation of more SVQs at higher levels (SVQ levels 4 and 5) creates the context where credit transfer from SVQs to the second or third year of degree study has become a real possibility. A number of interviewees commented on the value of the SCQF in enabling and legitimising the concept of SVQ to degree articulation: '*it allows novel or contentious ideas to be tested in the framework'* and '*developing this programme would have been very, very difficult without SCQF…it provided legitimacy so that when I was arguing for equivalence of SVQ it wasn't simply me saying so, I could point to the SCQF framework… SCQF is a huge enabling factor'*.
But interviewees stressed that the idea of articulation from SVQs to degree is at a very early stage and the differences between the qualifications mean that universities cannot simply apply the model they use with HNs to create an SVQ articulation route. One interviewee contrasted his experience of trying to develop an SVQ to degree articulation route with that of creating an HN-degree route: *'with HNs the building blocks are there, it's just a case of tweaking it, but not with SVQs'* and the process was a much more difficult and time consuming exercise than expected.

Barriers to credit transfer. An important barrier, it was suggested, is people's understanding of SVQs, that they perceive credit transfer as difficult because SVQs are work-based; certainly universities were seen as reluctant to recognise candidates' industrial experience. Interviewees identified other difficulties relating to the composition of SVQs which were perceived as requiring universities to consider SVQs on an individual basis because of the different possible pathways through the same SVQ and that within an SVQ at a given level, individuals will have units at different levels, for example, individuals with an SVQ level 4 have units within it that when matched across to SCQF levels range from levels 7 to 10: this is difficult to map against a degree programme where students study at one level within each year of the degree. It was also noted that while there has been progress in credit-rating SVQs, the fact that SVQs at a given SVQ level may sit at either of two SCQF levels could cause confusion.

Where an SVQ-degree route was developed, it was common for the university to require candidates to undertake some additional element on top of their SVQ either to add some more credit or to cover some gaps in knowledge or skills: for example, eg to undertake bridging modules in study skills.

Current trends. The idea of SVQs becoming 'normal' entry qualifications for a degree was seen as '*a long, long way off, if ever'.* The current initiatives on articulation from SVQ to degree are mainly considering part-time provision and are exploring new models of credit transfer. Rather than articulation with a reduction in time into an existing degree they are exploring a 'top-up' model whereby a new degree is designed that builds on candidates' existing credits. The latter model is more likely to be designed to recognise their work experience and to be taken on the basis of part-time and possibly work-based study with extensive use of e-learning approaches. It was suggested that within the 'top-up' model, it is possible to adopt an approach whereby there is less prescribed content – referred as 'shell degrees' - to allow the maximum contextualisation for the individual in his/her particular industry and particular job role.

Credit transfer from other VET to degrees: initiatives

The focus on initiatives in this interface is on part-time and work-based provision in response to a recognised need to upskill and re-skill the workforce and to do so in ways that are attractive and cost-effective for both employees and employers.

Work based part-time Youth Work degree. This part-time work based degree was developed through a partnership involving Edinburgh City Council, Edinburgh's Telford College, Edinburgh Napier University with support and funding from ELRAH, the Articulation Hub covering the east of Scotland. The impetus was the requirement of the standards body for a qualified workforce and so Edinburgh City Council as a major employer of youth workers was interested in a flexible, work-based degree that would not require employees to be absent from their workplace for extended periods and would offer exit awards at different levels to suit staff in different posts as well as providing incremental steps. There are exit awards at certificate, diploma, foundation degree and ordinary degree levels. The first students entered in 2011- 2012 across all the levels of the degree.

Entry requirements to year one include a Scottish Progression Award in Youth Work at level 6 as well as Highers and A levels. Relevant HNCs and HNDs give entry to years 2 and 3 respectively. But there are no SVQs at a sufficiently high level to give advanced standing; if SVQs are used as entry qualification to year 1, they are considered on an individual basis using an RPL process. More than half of the students entered the second year of the degree, either because they had relevant qualifications or had sufficient experience as assessed through RPL.

Partnership working was essential to the development of the degree; lessons include the need to be clear about each partner's remit and contribution from the beginning in a context where each had different priorities and the need to ensure communication and a common language and understanding. The delivery of the degree through 'blended learning' that makes extensive use of online approaches with very limited face-to-face teaching was a challenge, requiring university staff to adapt their thinking and practice.

SVQ to BA degree in Business Enterprise (BABE). This is a joint degree between Motherwell College and Edinburgh Napier University in which students enter the third year of the degree. The first students were recruited in 2008-09 following a five year development process and the degree is now part of the university's portfolio. It was described as '*a long struggle'* to achieve mainly because the concept was novel to both the college and university partners. In addition market research had to be conducted with past and current students as well as employers to gauge the feeling for such a new approach.

The initiative arose from an identified lack of progression opportunities to meet the expressed demand from students completing SVQs (levels 3 and 4) in management at Motherwell College. More generally it reflected the Scottish Government's skills strategy and the expectation that colleges and universities should make more use of the SCQF to contribute to this strategy (SG 2007). The project

received funding from the SFC which not only helped enable development work but also provided legitimacy for it in other people's eyes.

The degree is aimed at staff working at supervisor or managerial level; entry requirements are an SVQ 4 in management with the addition of a non-credited weekend bridging course covering report writing, research skills etc. The degree is designed to give credit for workplace experience and to enable students to study flexibly in their daily employment so it uses blended learning approaches including e-learning; students only attend university one day per month. Half of the degree is written in an experiential methodology and comprises a workplace based learning project carried out on an e-learning basis: '*it's not a normal study degree'*. It was described as being modelled on how students had learned before in their SVQ with a combination of theory and workplace experience which meant that '*it wasn't a complete flip where it became an academic degree'.*

Issues that the project faced included finding staff in the university who were interested in the concept; initial approaches to academic staff in Business Management were unsuccessful whereas an academic in Business Enterprise was interested in being involved. Development was thus an individualised rather than an institutionally led process.
The project encountered the issue of where SVQs sit in SCQF as we outlined earlier. Level 3 was seen as insufficient so that an SVQ at level 4 was required with the addition of a study skills bridging course. The approach taken by Edinburgh Napier University in terms of candidates' credit points is interesting: 240 credits were required but rather than tally up the number of specific credits that a student had, the university accepted that the 'package' of an SVQ4 plus a study skills course was equivalent to 240 credits.

SCQF was seen as critical to the project, that it provided the legitimacy without which this sort of degree would be impossible to develop. Similarly e- learning was noted as vital, that *'the degree wouldn't work without it'.*

Edinburgh Napier University has evaluated the students' project work and concluded that it was better than that of many traditional-entry students because of their industrial experience. Some of the students have progressed from their ordinary degree into the MBA at Edinburgh Napier. The model was thought to be applicable to other subject areas for candidates in employment who have substantial workplace experience and sufficient maturity.

SECTION 5: OPERATIONS

Project members agreed that to illustrate how credit transfer operates in practice we would each use a common set of fictional case studies and explain the process and procedures in terms of credit that would be followed in our respective country. This section reports on these 'scenarios'. They illustrate that in most cases there are multiple routes that might be taken depending, in part, on the purpose(s) for which the individual wants to have her/his qualifications and/or experiences recognized. It is clear from the scenarios that the process is an individual one with the outcome depending on the particular nature and circumstances of the individual's qualifications and experiences and the decisions of employers and learning providers who are generally free to make their own judgement on a case-by-case basis. In Scotland, the responsibility is very much on the individual to be proactive in initiating the process to gain credit and s/he may well have to fund the process and any award of credit. Help and support are available from, for example, career advisers or FE and HE institutions and employer bodies but this too has to be sought out by the individual. Such support, however, is critical for an individual to be successful in gaining credit. It is evident from the scenarios that credit transfer is not automatic and is limited in practice, it is more likely that previous experience and qual-

ifications will improve an individual's chances of successful entry to education and training than lead to any exemptions or a shorter duration.

(a) Hassan is 22 years and has lived in the UK for three years. How can his learning abroad (his certificates or diplomas) be recognised?

Hassan could use the services of UK National Recognition Information Centre (NARIC) which is the national agency, managed on behalf of the UK Government, which provides the official source of comparison information and advice on overseas skills and qualifications. If he holds hold technical or vocational qualifications and skills the UK National Reference Point for Vocational Qualifications (UK NRP) within NARIC would offer a more specialised service. He would have to meet the costs of using NARIC services; these can be accessed on- line and by mail. Skills Development Scotland advisers locally may able to support Hassan with the initial referral to UK NARIC and the next steps of how to use this information in future career plans.

NARIC would provide Hassan with a ***statement of comparability*** for the level and type of certificates or diplomas he has gained in his home country. This statement of comparability would be the springboard from which to negotiate his suitability for the most appropriate entry level for the work, training or education he is interested in. It is used by universities, colleges, employers and government departments and agencies, forming part of their decision making. There may be scope for some Recognition of Prior Learning if there are any gaps between Hassan's recognised qualifications and his preferred entry point. If Hassan has come to the UK from a non-EU country, the statement of comparability could also be used to help support applications made under Tiers 1 and 2 of the Points Based System for immigration to the UK[5].

Some professional bodies and chartered institutes would carry out a sector specific statement of comparability, especially if the qualifications exceed the recognised standard of a bachelor's or master's degree or a PhD in the UK (although UK NARIC is the only official body recognized by the different qualifications frameworks in the UK).

Employers and training providers may require further competency based evidence regarding Hassan's suitability, for example, it would be important that he could deal with competency based questions at interviews that would require him to describe specific situations from his previous experience that would illustrate his learning and skill levels. It is likely that further and higher education Institutions would ask for supporting personal statements regarding the relevance of Hassan's qualifications and skills for entry to any new course.

(b) Pia is 19 years old. For the past two years she has worked voluntarily in a zoo and now she wants to enter vocational training in order to become an animal keeper. Are there procedures implemented in the systems in order to shorten the training period?

Pia is aiming to entering a very competitive industry sector and occupation. Personal commitment is highly valued and relevant volunteering experience is a pre-requisite for candidates to be considered for entry into the job rather than enabling the training period to be shortened. Zoos give take great care in selecting the most suitable candidates from the large pool of potential recruits.

[5] In 2008, the UK implemented a points based system for non-European Union migrants wishing to come to the UK to work, study, and train. The new system comprises five tiers with each having different conditions, entitlements, and entry requirements for migrants wishing to work in the UK. http://www.workpermit.com/uk/uk-immigration-tier-system.htm

It is imperative that some of the skills and experience the obtained as part of her voluntary work with the zoo are taken into consideration when recruiting onto the training routes for a zookeeper. If Pia has any competency based evidence within her voluntary work that she can demonstrate on application forms and at selection interviews, this will help her compete more successfully for the trainee zookeeper opportunities; there are only six zoos in Scotland so employment opportunities are few. This also means that there are only a few courses available. There is no publicly funded Modern Apprenticeship in Zookeeping in Scotland.

The most popular method of training to be a zookeeper is on the job, with part time attendance/ distance learning with a college or training provider. There are some foundation level full time degrees at Universities in England. Some animal care courses, at SCQF Levels 3 and 4 are available, and although these do not qualify the candidate for specific zoo-keeping jobs, they do offer highly relevant transferable skills.

There are some distance learning and part time courses available in Zoo Animal Management, which employing organizations may use to offer distance or work based learning accreditation of qualifications. An individual's entry point into these courses is based on previous skills and qualifications and where Pia's voluntary work experience would be taken into account but it would not attract prior credit leading to exemption from any elements of course content, or acceleration into higher qualification levels: the entry requirements are often supplemented by additional relevant voluntary experience which negates the likelihood of any RPL activity being taken into consideration.

(c) John is 25 years and used to work as a hair dresser. Unfortunately and all of a sudden he became allergic to the chemical products and he can´t go on working in his job. Are there opportunities for getting the learning and experience credited towards the completion of another hairdresser related VET?

If John is fully qualified as a hairdresser, he may be able to transfer his skills and experience towards another related occupation. He could use the relevant Sector Skills Council to support him through a discussion about other occupations which lie within its remit. Habia is the government appointed standards setting body for the hair and beauty sectors: as a central information point, Habia provides guidance on careers (among other matters) and could also give John advice on the cross referencing of National Occupational Standards within the occupations it covers.

If he was considering a move towards beauty therapy or other related areas, it would be crucial that the same allergy was not a continued risk and it would be John's responsibility to consult an occupational therapist for guidance on this.

If John wishes to undertake other learning, the method of training - work based, college accredited or through a combination of both - would not be relevant to any transferability of skills and competence. The critical factors are the level of award, the specialisms and core elements within the qualification and the awarding body. If John has hairdressing qualifications, he could go to the awarding body to understand the different elements of the qualification and how these could be mapped to any related course to see if any other discipline has a close match with his existing qualifications and enquire about accelerated entry, recognition of particular aspects of course content and potential exemption from any assessments or validation activity.

It would be at the discretion of any course leaders whether any RPL activity would be considered. This would also depend on any quality assurance systems in place by the learning institution. If exemptions or accelerated entry are allowed, this would normally have to be evidenced with an alternative statement of prior competency reached. This could be gathered through a recorded statement of professional practice by John's managers/ supervisors and /or by a written statement of observed tasks/duties from the assessor acting on behalf of the new learning provider.

However, there may be difficulties in funding any courses for John's change of career. The support required to complete any mapping activity may be difficult to access and involve coordination of services across different organizations. Awarding bodies, the Sector Skills Council, careers guidance services and learning providers could all play a part in supporting John through his decision making. If he wishes to embark upon a career re-orientation, which is not being funded by his employer, he may have to fund new courses, with no financial support. The course providers may offer flexible input to full time courses, and could also offer bespoke personalized course interventions for John at reduced costs. This would require individual negotiation, which may take additional time and effort.

If John's employer is willing to redeploy him in management, training or other related work, there may be no requirement for him to have his skills formally assessed. He could embark on work based learning qualifications at the most appropriate level for his new job role.

If John has no formally recognized qualifications he could enter into negotiations with future employers and learning/ training providers about the most appropriate entry level for his new job. His portfolio of skills and experience would be taken onto consideration to decide upon the most appropriate role. There would be less likelihood of any formal recognition of his previous skills and experience.

(d) Maja is 29 years. For the last 9 years she has worked as a skilled chemical laboratory technician and now she wants to enter HE in order to study chemistry. Are the mechanisms in the systems helping her to get her learning and experience credited towards studies?

Maja can apply for advanced standing onto a chemistry/science based HE course, depending on the nature and extent of her previous qualifications and skills. Credit Transfer or Recognition of Prior Certificated Learning is the process through which previously assessed and certificated learning is considered and, if appropriate, recognised for academic purposes. It can enable a learner to transfer credit gained within one programme of study to another programme of study at the same or a different institution. The level of formal qualification which Maja holds will be the starting point to assess the most appropriate entry level within Higher Education. She can use the SCQF to explain where her existing qualification lies (likely to be SCQF 7 or 8) and see if there is any gap between this level and the entry requirements for her chosen HE course. She may be able to enter the second or third year of a degree programme.

The significant aspects here are the level of qualification and skills she has achieved and how these relate to the chosen course content. The closer the match of her most recent work experience to the course content, the more likely she is to be awarded credit. She must also demonstrate some recent learning activity for consideration, so this should also be factored in to any application processes.

She should make enquiries to the preferred Higher Education Institutions about procedures before she makes any formal application. Each individual HEI has different policies regarding this process. Different faculties and course leaders may also have some level of discretion regarding admission on to individual courses and have flexibility on selection criteria. The level of demand for the particular course that Maja is interested in is also likely to have an impact on the institution's response.

If Maja's current qualification is a Higher National Certificate or Higher National Diploma then the process is likely to be relatively straightforward but less so if her qualification is an SVQ. Some HEIs have formal Recognition of Prior Learning processes and it would be likely that they would use this to assess her SVQ qualification or other experiential/industrial learning in terms of credit towards the degree, which may give exemption from some elements of the course and/or increase the possibility of advanced entry to year 2 or 3 of the degree. Some HEIs are more proactive than others in their acceptance and promotion of RPL activity. These tend to be the newer HEIs. Maja may have to pay

for to undertake RPL, there no consistent pricing policy for this across HEIs, some pass on additional charges to the candidate for this more in-depth analysis of candidate information while others do not.

An alternative approach would be for Maja to apply to the Open University (OU). The OU provides higher education from certificate to doctorate level on a distance learning basis and students often study part-time while continuing to work. The OU explicitly aims to widen access to higher education and operates an open entry policy accepting applications from individuals with no formal qualifications. It also has a well established credit transfer service for students who have successfully completed courses/modules above Higher or equivalent level (ie above SCQF level 6) awarding them credit that can count towards the credit requirements of an OU qualification and reduce the number of modules that need to be taken. If Maja has an HNC/D then this should be relatively readily credited but the OU also recognizes vocational qualifications including N/SVQs so that if Maja has an SVQ then she may well be able to get credit from the OU for this depending on the level of the award: N/SVQ awards need to be at level 4. While no credit can be awarded for a partially completed NVQ4, the position is different with respect to SVQs: if Maja has completed individual units of an SVQ4 that have been assigned by SQA a credit value and level at SCQF 7 or above then, in principle, thes individual units would be credited by the OU. Depending on the requirements of the particular OU qualification Maja wishes to study she might gain either 'module exemption' or 'general credit exemption'. Module exemption would mean she would not have to take a particular OU module (s) while general credit would mean she was awarded a certain number of credits that towards her overall qualification.

(e) Curth is 23 years. At the age of 16 he started training in order to become a mechanic. After 9 month of training he dropped out. Now he decided to continue with VET. He wants to start training as a mechatronic – a qualification which is quite close to the mechanic – qualification. Does he have to start from the very beginning?

Curth has had a gap in his training experience and therefore has to reapply to college and employers for further development. His previous experience will be taken into consideration for his career change, and will count positively towards his selection into a related occupation. It is very important for Curth to be able to articulate the exact learning experiences he has completed in the past and to be very clear about how these relate to the new training in mechatronics. If he has any course or training manuals or workbooks from his mechanics training, with examples or copies of any completed assessments or assignments, these would prove invaluable in helping him to make a case for the close relationship between the two training experiences. If this type of detail is missing or incomplete, it will be more difficult for him to work with his new learning provider to identify any overlaps and gaps in his overall training package.

If Curth's had previously been following a Modern Apprenticeship in mechanics, the details of his learning log will have been very well monitored by his training provider and employer since their funding from Skills Development Scotland is related to the successful achievement of milestones within the National Vocational Occupation. There are only a few training providers which operate the monitoring arrangements for mechanics and mechatronic apprenticeships and the electronic systems for recording candidates' data is very reliable. It would therefore be straightforward to determine which parts of a VQ Curth had already achieved and for a mapping exercise to take place, identifying overlaps and gaps within earlier and new training options. This may prove more challenging if there were incomplete units or modules, which may not have been recorded on the system. The Sector Skills Council for the motor industry, the Institute for the Motor Industry, would be able to offer guidance and support about the possibility of mapping one qualification to another. The learning provider has the responsibility of helping Curth to review which aspects of his original qualifications may not have to be repeated with a different vocational qualification.

If Curth were applying for a new Modern Apprenticeship in mechatronics, the earlier publicly funded aspects of his mechanics Modern Apprenticeship would be taken in to account for his new traineeship. He may not be entitled to the full funding for the whole VQ for mechatronics, so it is in the interest of the training provider, employer and Curth, to ensure that any relevant prior learning is credited to his new Modern Apprenticeship. The core skills elements and perhaps some other aspects, such as health and safety units, which are consistent across the Modern Apprenticeship Framework for the motor industry, are the elements most likely to be credited. An occupational expert from the training/ learning sector would give the most relevant support, here. Skills Development Scotland is the national organisation which would apply the regulations regarding eligibility for funding and could support Curth with relevant careers guidance to make sense of the technicalities of transfer between one Modern Apprenticeship and another.

The funding sources for full and part time college courses are different and Curth would have to liaise directly with the further education college to find out if his prior learning could be used to enable him to be exempted from any aspects of a mechatronics course or, more likely, a course in a related area: there may be some relationship between his mechatronics training and the different National Certificate or Higher National Certificate courses at college. A Personal Learning Adviser, working for the further education college could support Curth through this process. Nevertheless, it is unusual for students to do anything other than complete the full course. If he were to complete a full-time FE course it is unlikely that transfer from this on to an MA would result in exemption or acceleration through any parts of the SVQ within the MA programme.

(f) Susan is 17 years. She lives in a structurally weak region where training places are scarce. Therefore she started a vocational training preparation measure in the field of "services, health, care". Through placements in a youth centre and in a community centre she gained first experiences and now she wants to become a housekeeper (a person who is managing the service and the catering of big public or private centres – does she have to start from the very beginning with the training although she gained some experiences?

It is likely that Susan has been on a Get Ready for Work Training programme; this is a national programme which aims to develop young people's employability and core skills rather than provide vocational training and lead to the award of formal vocational qualifications. Susan will have gained useful work based experience in local youth and community centres through the programme and at the end of it will have an individualized training record, and helpful references from her work placement employers.

It is likely that Susan's ambition to become a housekeeper will only be achieved over a period of time during which she would need to gain experience in other lower level jobs in the hospitality sector and/or undertake relevant qualifications. One route would be through work based learning and the achievement of relevant qualifications such as Scottish Vocational Qualifications (SVQs) Level 2 Housekeeping and Level 3 Hospitality Supervision. There may be strong links between her Get Ready for Work training provider and local employers which might improve Susan's chances of being recruited. It is likely that an employer would expect Susan to start at a lower level job with more general duties before embarking on the housekeeping job with additional responsibilities.

Another route to achieve her ambition would be for Susan to apply for a full time hospitality course at a further education college. She would most start with a National Certificate course before then advancing her learning through a one year Higher National Certificate and/or a two year Higher National Diploma. There would be scope on the National certificate Course for the core skills Susan gained on her Get Ready for Work programme to be evidenced through observation and reflective accounts of her work experience as well as being further assessed through more formal techniques. Credit for the core skills would might mean that she would then go on to take them at a higher level than be exempted from any core skill element of the course.

There may be a possibility of some work based learning aspects to be incorporated into these course, although these would probably supplement core course content rather than be used to replace or offer alternative methods of generating evidence towards the achievement of learning outcomes. This type of work experience is very enriching and would assist Susan in developing skills and how these can be used in the workplace.]

(g) Marita is 39 years. At the age of 21 she completed VET and became a nurse. She stopped working in her job in the age of 23 when the first child was born. Marita´s husband is a master carpenter. He runs a small company with three employees and an apprentice. For years Marita supports the company by doing the book keeping and the office work. Are there opportunities for Marita to get her experiences recognized?

A key question is the purpose for which Marita would like to have her experiences recognized. If she is now planning on working for another employer, her skills and experience may be enough to help her be recruited into an administrative or accounting technician job. If she is interested in obtaining formal qualifications within accounting there are professional bodies which accredit the training and awards. There are two main qualifications at technician level which can be taken and Marita could study by day or block release or evening class, by distance or open learning or by a combination of these to obtain these qualifications. There are clear, well established training routes which would allow Marita to progress from technician to professional level accountancy.

The length of training Marita would have to take would depend on how her skills and experience are assessed. The professional bodies for accountancy can give advice and guidance on exemptions and pre- screening of work based skills to ensure that Maria's previous experience can be taken into account. The work of accountants is regulated by statute and so the requirements of quality standards to be adhered to are particularly strict. These professional bodies would also give advice on what would be the most appropriate method for Maria to complete her studies.

The Recognition of Prior Informal Learning (RPiL), is the process of recognising and, if appropriate, assessing and then credit-rating learning an experience that has not been previously formally assessed and credit-rated. Informal learning is defined as knowledge and skills gained through life and work experiences as well as through non-formal and non-certificated learning, development and training activities or programmes. Any credit rating for Marita's work in her husband's company would require to be evidenced by documentary support. This process is very individual and depends on the particular personal circumstances of each candidate. Marita would have to be able to put her experience and learning into context, explaining how it relates and contributes to the learning that she wants to undertake.

Alternatively Marita may wish to remain working in her husband's company. Scottish Government funds a service known as Business Gateway, to support small businesses in their initial start up and their subsequent growth. Maria could use its website to find out more about the ways in which her skills and experience could be formally recognized, in order to enhance the potential profitability of her husband's business. She could attend classes and workshops on the benefits of having her skills and experience developed further through her attainment of formal qualifications. The Business Gateway advisers could put her in touch with local learning providers and could give advice on any relevant funding which Maria may be able to access, depending on the nature of the business. For instance, if the business is in a priority or growth area, there may be subsidies towards development.

SECTION 6: EUROPEAN PERSPECTIVES

SCQF and ECVET compared

The SCQF and the ECVET are based on a number of common principles. Both are based on learning outcomes (using the same definition) and both assume that outcomes will be grouped into units. Both are linked with a wider set of measures concerning qualification levels and quality assurance. Both are voluntary; the recognition of credit for transfer is a decision for the receiving organisation (in SCQF terminology) or the home institution (in the ECVET terminology). However, the SCQF's distinction between general and specific credit is not reflected in the ECVET.

Both the SCQF and the ECVET adopt a time-based metric for credit points, although this is less clearly articulated in the case of ECVET. ECVET's convention of 60 credit points per year of formal full-time VET suggests that an ECVET point is twice the value of an SCQF credit point, whose value is based on a convention of 120 credit points per year. (This principle is used to convert SCQF to ECTS credit points.) However, the two frameworks differ in their treatment of units which appear in more than one qualification. If the same unit is common to several qualifications the number of ECVET points attached to that unit may vary from one of these qualifications to another. In the SCQF the same unit has the same general credit value regardless of the qualification to which it contributes, although its specific credit value may differ. This difference reflects an underlying difference in approach. ECVET points are allocated first to a whole qualification (on the basis of the expected learning time in one chosen learning context) and then subdivided among the component units. In the SCQF the process works the other way round: points are allocated first to units and then to the qualifications built from those units, although the design of a unit may be influenced by assumptions about the qualification(s) of which it will be part. In this respect the SCQF is closer to the current ECTS than to ECVET; some Scottish experts on credit anticipate that the current ECVET arrangement will prove confusing or unworkable and eventually converge towards the ECTS/SCQF position.

Another possible difference arises from the fact that credit is built in to a levels framework in the case of SCQF but not the EQF. Both SCQF and ECVET credits should be understand in relation to a specific level of the respective framework, SCQF or EQF. But in the SCQF a whole qualification at a given level may include units at levels below (or above) that level, whereas there is no clear guidance on this in relation to either ECVET or the EQF. It remains to be seen whether this causes difficulty in the cross-national transfer of credit.

The influence of European developments on policy and practice in Scotland

This is a brief section: European influences on Scottish policy and practice concerning credit in relation to VET were conspicuous by their absence. European issues were rarely mentioned by our interviewees except in response to direct questions, and the level of knowledge among respondents, especially those not involved in national-level policy developments, was low. Our notes on the interview with one otherwise well-informed respondent read: "*X is much more knowledgeable than most employers but had not heard of EQF and ECVET although he noted the need to have a way of assessing foreign applicants' qualifications*". One respondent did, however, suggest that EQAVET might be an important influence in future, and one respondent noted that within higher education Bologna had been an important impetus for the development of RPL, which had been interpreted broadly to embrace credit transfer.

Our interviews pointed to several reasons for the relatively marginal influence of European developments. The first and most important is timing. The EQF and ECVET are recent developments (significantly more recent than Bologna) and were introduced long after the main outlines of the current Scottish arrangements were established. Indeed, the main influences were in the opposite direction: Scottish experience informed the development of both the EQF and ECVET, although neither is the creature of anglophone hegemony that some critics have alleged. Several interviewees said that

Scottish organisations, including the SQA, were (as of summer 2011) still working out how to engage with ECVET.

A second reason concerned organisational responsibilities. The SCQF Partnership had been heavily engaged with European developments but it had a small staff and was at arm's length from practice (the SCQF is an enabling and not a regulatory framework). ECVET was concerned with vocational qualifications and was seen as the responsibility of the SQA (the partner leading developments in that area) rather than the SCQF Partnership. The SFC has seen its role in relation to the EQF and ECVET as mainly to promote awareness and understanding.

A third reason was uncertainty over the scope and potential use of EQF and ECVET. One interviewee had been involved with an SSSC project to map foreign qualifications. The EQF and ECVET provided useful tools for this purpose but the project still needed to look at individual qualifications in detail. A second interviewee described a European project, led by the SCQF Partnership, which examined the role of the EQF in five sectors: construction, social care, health, travel and tourism and land-based industries. It concluded that the levels were useful as a starting point but they still needed to examine the content of qualifications. The scope of an occupation and the skills required to practise it varied from country to country. "*A baker in Scotland is not the same as a baker in France*." The project focused on the EQF; ECVET would help but not remove the underlying issue. A third interviewee indicated that some people had unrealistic expectations for the potential role of the European tools: "*Going by queries from training providers and colleges, there's a lot of misunderstanding about the EQF; it's not appreciated that it's only a reference or mapping framework, it's not about giving credit*." He added that ECVET was "*causing a lot of people a lot of headaches*".

Scotland and other UK developments

A fourth reason why European influences have been marginal is that these have been less pressing than those arising from developments in the rest of the UK. England is the elephant in the room of Scottish VET, which has to ensure that it is not suffocated by its giant neighbour before it can attend to its relations with more distant creatures. As one interviewee pointed out, employers have enough difficulty in understanding the different UK frameworks without having to consider the EQF and European frameworks as well. Scottish employers already have to deal with two sets of qualification levels, as SVQs are expressed in terms of English (former NVQ) levels although each SVQ is also given a level on the SCQF. The requirement also to report EQF levels on certificates could add further confusion.

The UK has an integrated labour market. There is substantial mobility across its internal borders and many employers operate in more than one country of the UK. The need to maintain alignment with developments elsewhere in the UK has significantly constrained the development of Scottish credit arrangements. It slowed down the process of credit-rating SVQs, and it continues to constrain this process because SCQF levels and credit values need to be compatible with those defined in England. The introduction of the Qualifications and Credit Framework (QCF) in England has imposed further constraints and delays-. In the early days uncertainties about the QCF requirements delayed the development of Scottish qualifications in sectors where the UK dimension was important. Since the QCF has been 'up and running' the need to meet its strict requirements has meant that many sectoral organisations and qualifications bodies with a UK-wide remit have largely abandoned their involvement in Scottish qualifications developments. And the differences between the SCQF and the QCF are a potential source of confusion. The SCQF is comprehensive; the QCF only covers vocational qualifications. The SCQF is a loose enabling framework; the QCF is a tight regulatory framework. Some QCF qualifications no longer match their Scottish 'equivalents' because they have been increased or reduced in size to meet the QCF specifications. Many qualifications within the SCQF use labels such as certificate and diploma to distinguish qualifications at different levels; the QCF uses these labels to distinguish different sizes of qualifications. The SCQF is primarily concerned with gen-

eral credit; the QCF is primarily concerned with specific credit. In the words of one interviewee, "*It's an absolute nightmare to explain to the industry*."

SECTION 7: CONCLUDING COMMENTS

We return to the paradox of Scottish education and training which we outlined in section 2. We expressed this paradox as follows. On paper, Scotland has a credit-based lifelong learning system which is widely seen to be one of the most flexible in the world; but there is relatively little credit transfer to be observed, in practice, in Scotland.

This has been borne out by the research reported above. There is little credit transfer across the first of our interfaces, between prior learning (including general and prevocational education) and mainstream VET, with the main exception of core skills for which some VET programmes recognise credit. Relevant prior learning may help people to gain access to VET, it may enhance their learning within VET and it may even reduce the time they spend in their VET programmes, but by and large these contributions are achieved without any formal process of credit transfer. There is similarly little formal credit transfer across the second interface, within the VET system. The design of some programmes makes limited credit transfer possible in principle; we have found little evidence that this happens very often in practice, but current changes may increase the scale of credit transfer in future. As with the first interface, prior learning may enhance the experience and sometimes the speed of learning but without formal credit transfer. Only across the third of our interfaces - between VET and higher education - is there evidence of credit transfer of a more traditional type. This largely took place in the transition from college-based sub-degree (HN) programmes to university degrees, and a large proportion of it was concentrated in a handful of institutions.

How do we explain this paradox? We elaborate our earlier explanations in terms of four broad conclusions.

The first is that *a system designed on the principle of credit accumulation may support flexibility and permeability through means other than formal credit transfer*. The design of many Scottish qualifications, and the architecture of much of the Scottish education and training system (especially VET), reflect a broad notion of credit accumulation. Programmes and qualifications tend to be relatively small. There are progression routes and connections between them, sustained by the leading role of a single awarding body for non-university qualifications and a comprehensive credit and qualifications framework. Entry to programmes and movement between them is flexible, at least with respect to formal requirements. There may be flexibility within the programme, for example to cover units at a higher or lower level. Many programmes can be taken at a faster or slower pace, and allow learners to take the assessment when they are considered to be ready rather than according to a fixed timetable. As a result many of the benefits of flexibility may be achieved by the way in which learners enter and move between programmes, or progress within them, without the need for more formal processes of credit recognition and transfer.
However, we would not exaggerate the flexibility of the Scottish system. Our other propositions explain why, in practice, the Scottish system is far from 'seamless'.

Second, *a credit system on its own is weaker than the 'institutional logics' which impede permeability and flexible movement within the system*. Early research on the Action Plan distinguished between the 'intrinsic logic' of a qualifications system, which may favour credit accumulation and transfer, and the 'institutional logic' of its context. The institutional logic includes the factors which shape individuals' choices and opportunities for moving through learning and the labour market, institutional practices and the broader processes of educational and occupational selection which may inhibit the demand for credit transfer or the recognition of credit in practice. The tension between intrinsic and

institutional logics has been a leitmotiv of the development of credit arrangements in Scotland. The SCQF is voluntary, and education providers vary in their willingness to recognise and transfer credit at the interfaces where they operate. They may fail to do so because of a number of reasons, including the increased cost of flexible provision, a lack of trust in the learning or assessments delivered elsewhere, funding disincentives (although SDS' policy of refusing to fund repeated units did not always have the effect of reducing duplication), the requirements of regulatory or professional bodies, the persistence of time-serving norms and expectations, and so on. In some cases the architecture of qualifications does not facilitate recognition or transfer of credit: for example, prior learning may not map neatly onto whole units.

Third, *there is insufficient agreement concerning the types of learning and the contexts between which transfer is appropriate*. There are several apparent epistemological boundaries across which transfer is difficult. For example, many interviewees felt that the employability skills developed in much prevocational educational were qualitatively different from the vocational skills developed in mainstream VET, making credit transfer between the two inappropriate. There is an even stronger boundary between the (mainly work-based) provision which develops occupational competence and the (mainly college-based) provision which develops broader vocational capability. These are perceived to involve qualitatively different types of learning (and assessment) between which little credit transfer is possible. Indeed the strong emphasis on learning and assessment within a specific occupational context means that credit transfer is often considered inappropriate even within the same sphere of learning: learning about health and safety, for example, was considered by many interviewees not to be transferable between occupational contexts. And some interviewees with a labour-market focus complained that educationists were too unwilling to give credit for relevant industrial experience, even if this gave access to the kinds of learning outcomes that educational programmes aimed to develop. All these boundaries are contested. We referred to them above as *apparent* epistemological boundaries to reflect our observation in earlier research that political or institutional barriers may masquerade as epistemological ones (Raffe, Howieson and Tinklin 2007, Raffe 2009). Some of the boundaries described above may have been constructed, or at any rate exaggerated, in order to defend particular professional, institutional or subject interests, but that is beyond the scope of the present study.

Finally, and related to this, *the concept of credit, at least as it is interpreted and applied in Scotland, is still firmly anchored in the education system and especially in mainstream education*. Elsewhere we have contrasted the way that the SCQF has become embedded within the education system with its relative lack of impact on the labour market. The same contrast emerges from our interviews: several of those on the education side of the fence, especially those actively engaged in the initiatives reported above, praised the enabling role of the SCQF and noted that their work would be much harder, if not impossible, without it. By contrast, employers, or those speaking on their behalf, tended to see it as irrelevant. The increased use of RPL might help to narrow this gap, but so far its use is still too patchy and insufficiently associated with formal credit to have this effect.

REFERENCES

BLOOMER, M. (1997) Curriculum-making in Post-16 Education. London: Routledge.

CAMBRIDGE POLICY CONSULTANTS (2006) Evaluation of Modern Apprenticeship and Skillseekers. Cambridge: Cambridge Policy Consultants.

GALLACHER, J. (2006) Widening access or differentiation and stratification in higher education in Scotland. Higher Education Quarterly, 60, 4, 349-369.

GALLACHER, J., TOMAN, N., CALDWELL, J., EDWARDS, R. and RAFFE, D. (2005) Evaluation of the impact of the Scottish Credit and Qualifications Framework. Edinburgh: Scottish Executive.

GALLACHER, J., TOMAN, N. and BRODIE, J. (2006) Evaluation of the achievements of the SCQF against the National Implementation Plan. Glasgow: Centre for Research in Lifelong Learning (CRLL), Glasgow Caledonian University.

GUEST, P. and VECCHIA, M. (2010) Scoping Study on Support Mechanisms for the Recognition of the Skills, Learning and Qualifications of Migrant Workers and Refugees. Final Report. Glasgow: SCQF Partnership.

HART, J. and HOWIESON, C, (2004) Unitisation – Benefits and issues. Centre for Educational Sociology (CES), Edinburgh University

HOWIESON, C. and CROXFORD, L. (2011) Students' Experience of the Transition from HN to Degree Study CES, University of Edinburgh

INGRAM, R. and GALLACHER, J. (2011) HN Tracking Study: Final Report. Centre for Research in Lifelong Learning, Glasgow Caledonian University. www.crll.org.uk.

INSPIRE SCOTLAND (2008) A Review of the Recognition of Prior Learning. Final Report. Glasgow: SCQF.

KNOX H. and MASSIE E. (2005) Subject Specific Articulation from Higher national Qualifications to Degree Studies. Edinburgh SFC

KNOX H. and MASSIE E. (2007) Subject Specific Articulation from Higher national Qualifications to Degree Studies – Phase Two. Edinburgh SFC

LOWDEN, K., DEVLIN, A., HALL, S., HEAD, G. and LEWIN, J. (2009) Production of Case Studies of Flexible Learning and Support Packages for Young People who Require More Choices and More Chances. Edinburgh: Scottish Government. http://www.scotland.gov.uk/Publications/2009/04/24145410/0.

MCGOLDRICK, J. (1999) Project to Promote the Use of SCOTCAT: Report. Dundee: University of Abertay.

MILLER, K., EDWARDS, R. & PRIESTLEY, M. (2008) Cultures of curriculum making in post-compulsory education: the shared curriculum between school and college, Paper presented at BERA Conference, University of Stirling, Institute of Education.

MACLENNAN, A., MUSSELBROOK, K. and DUNDAS, M. (2000) Credit Transfer at the FE/HE Interface. Edinburgh: SHEFC and SHEFC.

ORGANISATION FOR ECONOMIC COOPERATION AND DEVELOPMENT (2007) Quality and Equity of Schooling in Scotland, Paris: OECD.

RAFFE, D. (2007) Making haste slowly: the evolution of a unified qualifications framework in Scotland. European Journal of Education, 42, 4, 485-502.

RAFFE, D. (2009) Towards a dynamic model of National Qualifications Frameworks, pp. 23-42 in Allais, S., Raffe, D. and Young, M., Researching Qualifications Frameworks: some conceptual issues. Employment Working Paper No. 44. Geneva: International Labour Office.

RAFFE, D. (2011) Are 'communications frameworks' more successful? Policy learning from the Scottish Credit and Qualifications Framework. Journal of Education and Work, 24, 3-4, 283-302.

RAFFE, D. (2012) National Qualifications Frameworks: European experiences and findings in an educational and an employment perspective, in Büchter, K., Dehnbostel, P. and Hanf, G. (eds) Der Deutsche Qualifikationsrahmen (DQR) - Ein Konzept zur Durchlässigkeit und Chancengleicheit im Bildungssystem? Bonn: BIBB.

RAFFE, D. and HOWIESON, C. (2012, forthcoming) Hybrid qualifications in a credit-based system: Scottish Higher National Certificates and Diplomas, in Deissinger, T., Aff, J., Fuller, A. and Jørgensen, C. (eds) Hybrid Qualifications – structural and political issues in the context of European VET policy. Bern: Peter Lang.

RAFFE, D., HOWIESON, C. and HART, J. (2010a) Progression Scenarios for National 4 and 5. Report to Scottish Qualifications Authority. CES, University of Edinburgh.

RAFFE, D., HOWIESON, C. and HART, J. (2010b) Credit Systems for Lifelong Learning: CS3L Background Report on Scotland. CES, University of Edinburgh.

RAFFE, D., HOWIESON, C. and TINKLIN, T. (2007) The impact of a unified curriculum and qualifications system: the Higher Still reform of post-16 education in Scotland. British Educational Research Journal, 33, 4, 479-508.

SCQF (2001) An Introduction to the Scottish Credit and Qualifications Framework. Glasgow: SCQF Partnership.

SCQF (2009a) SCQF Handbook: User Guide. Glasgow: SCQF Partnership.

SCQF (2009b) Final Report on the Referencing of the Scottish Credit and Qualifications Framework to the European Qualifications Framework for Lifelong Learning. Glasgow: SCQF

SCOTTISH EXECUTIVE (2006) More Choices, More Chances. Edinburgh: Scottish Executive.

SCOTTISH FUNDING COUNCIL (2005) Learning for All. Edinburgh: SFC

SCOTTISH EXECUTIVE (2004) New Scots: Attracting Fresh Talent to Meet the Challenge of Growth. Scottish Executive: Edinburgh. http://www.scotland.gov.uk/Publications/2004/02/18984/33666

SCOTTISH EXECUTIVE (2004) A Curriculum for Excellence: The Curriculum Review Group, Edinburgh: Scottish Executive.

SCOTTISH GOVERNMENT (2007) Economic Strategy. Edinburgh: Scottish Government. http://www.scotland.gov.uk/Resource/Doc/202993/0054092.pdf

SCOTTISH GOVERNMENT (2007) Skills for Scotland. Edinburgh: Scottish Government.

SCOTTISH GOVERNMENT (2008) Curriculum for Excellence: Building the Curriculum 3. Edinburgh: Scottish Government.

SCOTTISH GOVERNMENT (2010) 16+ Learning Choices: Policy and Practice Framework. Edinburgh: Scottish Government.

SCOTTISH GOVERNMENT (2011a) Review of Post-16 Education and Vocational Training in Scotland. Edinburgh: Scottish Government.

SCOTTISH GOVERNMENT (2011b) Putting Learners at the Centre: Delivering our ambitions for post-16 education. Edinburgh: Scottish Government.

WHITTAKER, R. (2005) Recognition of Prior Learning (RPL) research within a national credit and qualifications framework in Researching Recognition of Prior Learning: International perspectives ed Winak C., Harris J, and Breier M. NIACE: Leicester

ANNEX 1: INTERVIEW GUIDE

This is a comparative European project funded by the Federal Institute for Vocational Training in Germany (BIBB). The aim is to compare how credit systems operate in different countries in the area of VET with a focus on initial entrants.

The working definition of credit system that we are using is:

> *"procedures enabling the recognition and crediting of evidenced / proven learning outcomes in order to ease access and transition within the qualification system and/or to shorten the duration of training".*

Question areas:

- what are the main developments/initiatives?
- what are their main purposes/ what problems or issues do they aim to address?
- what are the policies and/or drivers behind them and who is pushing it?
- what are the formal procedures / arrangements?
- what are the expected/formal outcomes?
- how does it operate in practice?
- what is the impact to date in practice: most successful and least successful aspects?
- what are the main issues?
- what factors have helped/hindered?
- to what extent do the developments relate to wider policies on lifelong learning?
- influence of/connection with SCQF?
- influence of/connection with ECVET?

ANNEX 2: ORGANISATIONS COVERED BY THE INTERVIEWS

- SCQF Partnership
- Scottish Qualifications Authority
- Skills Development Scotland
- Scottish Funding Council
- SVQ/MA Work Based Learning Network
- Scottish Training Federation
- Modern Apprenticeship Group in Scotland
- Alliance of Sector Skills Councils in Scotland

- Construction Skills (Sector Skills Council for the construction industry)
- Scottish Social Services Council (the regulatory body for the social services workforce and the Sector Skills Council in Scotland for social care, social work and early years education)
- Semta (Sector Skills Council for science, engineering and manufacturing)
- Edinburgh, Lothians, Fife and Borders Regional Articulation Hub (ELRAH)
- South West Regional Articulation Hub (SWAH)
- Glasgow Caledonian University
- Motherwell College
- Reid Kerr College
- Jewel and Esk College
- City Building Glasgow (training provider)
- First4Skills (training provider)
- EDETA (training provider)
- Best Training Ltd (training provider)

Credit systems for lifelong learning CS3L:

Country Background Denmark

Jørgen Ole Larsen, Professionshojskolen METROPOL

SECTION 1: FRAMEWORK CONDITIONS

Understanding, purpose and characteristics of VET

Two illustrations are presented below. The first one is a visual overview of the Danish mainstream education system. References will continuously be made to educational programmes and pathways and these overviews can make it easier for the reader to get the full picture and context of the Danish system.

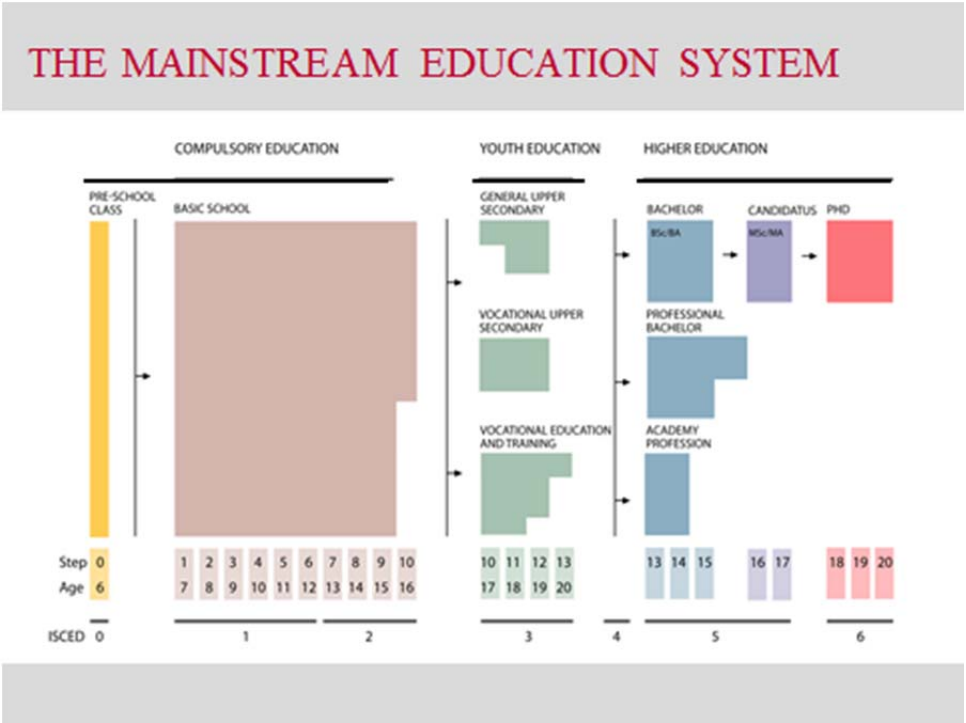


Illustration 1: Presentation of the Danish Education System. Source: www.ciriusonline.dk-

IVET programmes alternate between school-based theoretical and practical education (25%) and practical training in a company (75%).The dual training principle ensures that the student acquires theoretical, practical, general and personal skills which are in demand at the labour market. From the moment the training contract is signed, the company has the overall responsibility for appropriate learning.

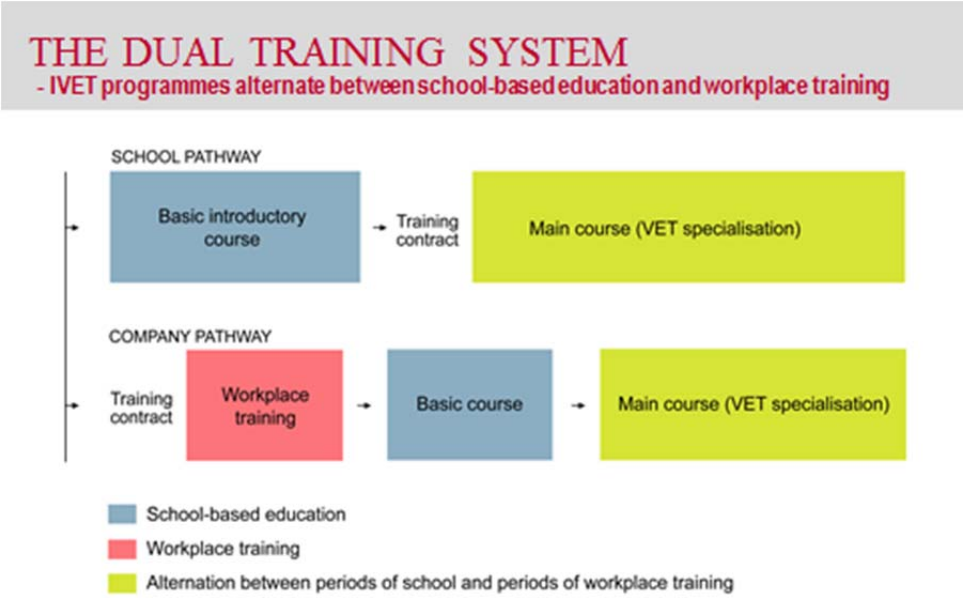


Illustration 2: The dual training system

As illustration 1 indicates, there are two main education pathways after primary education: Academically oriented general and vocational upper secondary education programmes and vocationally oriented education and training (VET) programmes. The distribution between the two pathways were in 2005: 55% to the VET and 45% to secondary education programmes and with the trend that more and more young students choose the secondary education pathway.
IVET programmes alternate between school-based theoretical and practical education (25%) and practical training in a company (75%). There are two main pathways: the commercial VET and the technical VET. There used to be a strong demarcation line between the technical VET (blue collar workers) and the business VET (white collar workers). This strong separation is slowly softening, a process, which is strengthened by the ongoing mergers between technical and commercial VET colleges and new combined VET programmes.
The dual training principle ensures that the student acquires theoretical, practical, general and personal skills, which are in demand at the labour market. From the moment the training contract is signed, the company has the overall responsibility for the appropriate learning of the student.
As the illustration indicates there are two pathways into the IVET programme, (1) the school pathway and (2) the company pathway. The school pathway begins with a basic introductory course at school. This is how most students enter. The company pathway begins with a training period in a company followed by a shorter basic introductory course followed by the main course.

The duration of the VET programmes varies but is typically 3 to 3,5 years for technical courses and 2 to 3 years for commercial main courses.

Since 20073, Basic Social and Health Care Education Programmes (SOSU) are part of the Danish VET system. The structure of the SOSU programmes is very similar to that of the technical and commercial VET system.

Political framework – "drivers" and trends

The Danish Government has very ambitious goals for youth education. These are:

- All young people should have a qualifying education. By 2010, At least 85 percent of a youth cohort shall complete a youth education b, and a minimum of 95 percent by 2015.
- The education programmes shall be attractive and of the highest quality.
- The general upper secondary education programmes shall provide pupils with good academic and general competences enabling more younsters to complete higher education.
- The vocational education and training programmes shall challenge the most talented pupils and provide them with increased possibilities for higher education. At the same time, the programmes must also provide realistic educational and training possibilities for academically weaker pupils.

Education for the last residual group up to the 100% is primarily expected to take place within the VET system and for that purpose flexible and combined programmes need to be set up in order to increase the number of young people with the necessary qualifications to enter initial training (IVET programme). The following means are expected to support these goals:

- ✓ **10th grade of primary education** (not compulsory) can be organized as a combination of VET oriented subjects, inclusive practical training, and traditional primary school subjects and hence improve the readiness and capability of the individual learner to complete an ordinary VET programme.
- ✓ **Basic Vocational Education and Training (EGU)** as preparation for VET or employment EGU is an individualised basic vocational education and training programme that is geared towards both employment and continued education. EGU is an alternating or sandwich-type training programme where practical training is combined with a subject-relevant school based part in an overall 1Y2-3 year programme in which the school-based part lasts between 20 to 40 weeks. The school-based elements are taken from a number of existing education and training programmes.
- ✓ **Possibility to prolong the duration of the VET programme**: Flexibility in VET is also the possibility to make individual VET pathways that exceed the prescribed duration of a programme. This can be the case for students, who by the VET school are assessed to need more education than the average learner. All students will be assessed no later than 2 weeks after having started on a VET programme.

A standing discussion in VET policy is the capacity of the VET system to attract the most talented students e.g. the above-mentioned goal and at the same time cater for youngsters with learning and motivational problems. The flexible approach, e.g. the individual assessment of each student is expected to reduce problems related to this paradox. Expressed in a simplified way one can claim that the ambitious goal to attract talented students to VET may have same repercussions on the other part of the system, hence making it difficult to include all kinds of student profiles.

The VET system regarding access and transition

Before explaining the motives for establishing credit systems, it should be highlighted that the Danish VET system for several years has been operating in accordance with the basic principles for outcome based learning.

The VET systems have regularly been changed in response to changes in labour market demands. Some of the changes have involved the development and deployment of competences linked to an outcome based learning context. This has also been the case for how theory and practice can be merged in a qualification description system. This will be elaborated in chapter

The political focus on setting up credit systems started in the 1990's in response to some major structural problems appearing in the labour market. These caused concerns about the VET system's limited capacity to offer low skilled workers access to qualify for more qualified jobs/professions and the small coherence between the VET and Higher Education System.

Three main motives can explain the Danish quest for establishing credit systems:

1. Response to globalisation
2. Lifelong learning initiatives
3. Improving of transnational mobility

- **Response to globalisation**

The concepts globalisation and internationalisation are often used randomly. Hence, it can be useful to separate them in order to create clarity and a common understanding of how they are applied in this paper/context.

We perceive globalisation as the worldwide and overall societal development mainly driven forward by the market economy. This feature has consequently established some mechanisms, that all countries around the world have to adapt to and try to influence. Internationalisation on the contrary is how the political decision makers relate to globalisation - proactively or reactively.

In Denmark, globalisation has had a huge impact on the labour market and more specifically in relation to job-opportunities for low skilled workers. New technology has during the last decades reduced the job opportunities for this segment and increased the demand for higher educated manpower, the so called skills bias[6].

In the period 1980 to 2002 the labour force in Denmark has grown from 2,65 million to 2,82 million persons[7]. The number of working persons without formal education beyond primary/mandatory school has decreased from 1,3 million to hardly 800.00 persons. The number of skilled workers has increased from 850.00 to almost 1,1 million, while the group of persons with a further education has been almost doubled from about 380.000 to over 700.00 persons[8].

The change of educational requirements for a number of sectors can among either things explain the increase in the employment rate for the group with further education and skilled workers.

lt is of course difficult to forecast the speed of Globalisation in the coming years. Still it seems well founded to foresee that the trends outlined above will continue and thus implicate growing demands for persons with higher education and diminishing demands for low skilled jobs. This will strengthen

[6] Finansministeriet: Globalisering, skill-bias og arbejdsmarkedet - udviklingstræk og fremtidige udfordringer- 2006

[7] Based on survey in week 48 each year

[8] Based on figures from the Danish Statistical Bureau

the need for setting up and implementing credit systems that ease the process for persons, who want to build on their existing education in order to be certified on a higher level.

- **Lifelong learning initiatives require solid credit transfer systems**

The Danish Government and parliament has during the last 20 years initiated extensive educational reforms with the overall objective to support economic growth and a flexible development of the educational systems and the labour market.

There are nine immediate objectives in the Danish lifelong learning policy[9]. In this context we will only refer to the ones, which are related to the area of credit transfer:

- A coherent education system from preschool to higher education must provide the opportunity for everyone to acquire excellent basic skills, a qualifying education and a solid foundation for lifelong learning. There must be equal opportunities and room for all.
- Opportunities for guidance and counselling must be improved and ensure the best possible conditions for pupils, students and adults to choose education programmes and to participate in lifelong learning.
- All forms of education and learning should be based on and build on the knowledge, skills and competences of individuals. In adult education and continuing training, new and improved opportunities shall be created in order to promote the visibility and recognition of an individual's prior learning.
- Coherent education paths and transparency in the education system shall contribute to target education and lifelong skills upgrading and facilitate the best possible use of public resources

- **Improvement of transnational mobility**

Internationalisation of the educational system is not a new phenomenon. The present globalisation trend was apparent already in the 70's, and the international competition has for a long time been growing. Generally, the Danish educational programmes have during the last decades gone through modifications in order to be more responsive to international cooperation e.g. mobility, EU projects and common credit systems.

This has also materialised in the various educational laws and ministerial orders specifically highlighting that the educational programmes and the implementing institutions shall strengthen the international dimension, e.g. the VET law, the Bachelor programmes and the vocational academy programmes.

According to the Bologna implementation process the EU ministers have set up the ambitious goal that by 2020 at least 20% of the graduates from higher education shall have participated in a study or placement activity as part of their education[10].

In 2007/08 the proportion of graduates in professional bachelor educations on study or placement visits abroad constituted 7,6% of the population. For academy graduates the equivalent figure was 3,8%. For the master graduates the corresponding tigure was noticeable higher, 28,9%.

As to the VET system the proportion of students taking place in visits abroad the percentage is considerably lower compared to students from further education. Out of 70.000 apprentices in the Danish VET system only 234 had placement abroad not including figures from Leonardo mobility pro-

[9] Danmarks strategi for livslang læring. Undervisningsministeriet. April 2007
[10] Goals set up a Minister summit in Leuven spring 2009

grammes. This should additionally be seen in the perspective that the Danish system[11] provides extensive support for mobility to VET apprentices outside Leonardo, a financial support system, which by other countries is seen as a role model for mobility support.

One of the tools to enhance the mobility is transparent and equivalent accreditation procedures between the Danish and foreign education institutions. Setting up credit-transfer system can support this process.

The significance of "crediting"

When were the credit systems developed?

Higher education
The history of credit systems within higher education is closely linked to the introduction and implementation of ECTS - The European Credit Transfer and Accumulation System in the late 1980's. Today, it is mandatory for all education programmes within higher education to deploy the ECTS system[12].

As part of the implementation of the Bologna process for Higher Education, in 1999 the ECTS was included as the basis of the system. In full compliance with the Bologna principles, ECTS plays an essential role as the credit system for Danish higher education.

IVET and adult education
The Law of Recognition of Prior Learning[13] passed by the Danish parliament in 2007, is by the stakeholders seen as a milestone in the endeavour to promote and encourage individuals to enrol in continuing education courses.

As highlighted and elaborated below this specific law was one of the outcomes of the ambitious political objective to create a coherent system for and code of practices for recognition of prior learning.

Before 2007, Denmark has had a long tradition of individual competency evaluation and credit:

- In 1997, when political initiatives to improve short skill persons' access to acquire formal VET qualification were materialised. This was manifested by the amendments in the existing VET law and by the passing of the law of Vocational Adult Training (AMU). The laws made it possible to transfer credits from one system e.g. AMU –VET to another and hence a possibility to shorten the duration of a specific training programme.
- In 2001, the law on Preparatory Adult Education (FVU)[14] gave access for adult applicants (more than 18 years) to apply for award of credits in specific subjects, mathematics and language in order to improve short skill persons' entry to further education.
- In 2003, an amendment of the VET law introduced and implemented the principles of the individual competence portfolio. According to this each student (both youngsters and adults) shall be provided with a personal educational plan (portfolio). The educational plan will be prepared based on the qualifications of each student held against the educational objectives for his/her VET programme.
- In 2004, the adult vocational law was passed and implemented. According to the law ICA Individual Competence Assessment was introduced. lCA also includes recognition of informal learning and work placed related competences.

[11] The AER system, which offers extensive support for companies which provide placement abroad for their apprentices
[12] Undervisningsministeriets bekendtgørelse nr. 356 og 867
[13] Law no.562 - 2007
[14] FVU law 2001

How was the process organised?

In Denmark two Ministries bear the main responsibility for the process:

- The Ministry of Science, Technology and Innovation is the main responsible institution for higher education.
- The Ministry of Education is the main responsible institution for all ether education programmes.

The Ministry of Science, Technology and Innovation was set up in November 2001 following that the former Ministry for IT and Research was extended to include the 8 universities, previously within the authority of The Ministry of Education.

The Bologna process is of course the pivotal point in the process of international accreditation processes. Before Bologna, Denmark was primarily administered by the Ministry of Education, involved in all the preceding international initiatives to promote good practice and improve national and international recognition and understanding of study competences, qualifications, higher education institutions and education systems, e.g. ECTS, UNESCO Recognition Convention, Europass, ENIG (European Network of Information Centres on academic recognition and mobility) and NARIC(National Academic Recognition Information Centres)

The Ministry of Science, Technology and Innovation has the overall authority of the Bologna process. This involves specifically the third, second and first cycle in the EHEA[15] context and corresponding to level 8, 7 and 6 in the EQF. The process is taking place in cooperation with the Ministry of Education and the Ministry of Culture.

The Ministry has set up a Bologna coordination group, which is in charge of following up and coordinating the practical implementation of Bologna projects and monitor the international work within the area. The process of promoting and providing information about the Bologna Process is carried out by the Danish Agency for International Education[16].

The Ministry of education is the main responsible for the rest of the Danish education systems and hence the process of setting up credit award systems. This includes the following educational pathways: Basic (mandatory) school, youth education including VET, professional bachelor studies, Academy profession studies, adult education and continuing vocational training.

Like the area of higher education, the Ministry of Education involves relevant stakeholders in the process of credit-transfer, e.g. schools, colleges and organisations representing the actors within the field.

Specific attention should be given to the part of the credit award system that deals with the national actions for promoting recognition of prior learning. This process and the launching of the prior learning campaign were initiated in close cooperation with the Ministry of Science, Technology and Innovation, the Ministry of Culture and the Ministry of Economic and Business Affairs.

As to the VET system, some important characteristics about the management of the system should be highlighted. The reason is that the Danish VET system is defined by a high degree of stakeholder involvement and decentralisation and these features have an impact on how the credit award systems are being implemented.

[15] The web-site of the Ministry

[16] The Danish Agency for International Education

The Ministry of Education has delegated responsibility and authority to the social partners and the vocational colleges. Specific attention shall be drawn to the authority distribution between the ministry and the social partners (the trade committees).

The Ministry/the Parliament is responsible for education policies and lays down the overall objectives for the IVET programmes and provides the framework, within which the stakeholders can adapt the curricula and methodologies to the needs of the labour market and the students.

The role of social partners? The trade committees lay down the detailed content of the education and training programmes within the general framework. This applies to the duration and structure of the programmes, their objectives and assessment, as well as the distribution between practical training and school-based teaching.

As already referred to, the introduction of the ECTS system and the Danish adoption of Bologna process are the major steps within the higher education area.

What were the steps and milestones on the way?
Higher education
As already referred to, the introduction of the ECTS system and the Danish adoption of Bologna process are the major steps within the higher education area.
In addition the following two achievements should be highlighted:

1. 2003 - The first Danish qualification framework based upon the Bologna principles
2. 2007 – Revised national qualification framework for higher education based on experiences from Bologna lessons and responding to EU expectations.

IVET and adult vocational training

Reference has already been made to the Law of recognition of Prior Learning as the foundation for setting credits into a more comprehensive and transparent system. The law was the preliminary final stage of a number of steps leading to this law:

In 1999, a report on the effects of the VET policy and actions within the area of adult and continuous professional training was published. The report was a joint product from a commission consisting of civil servants from the Government and the social partners.

One of the main conclusions was the lack of credit systems to promote and motivate low skilled workers to start on an education pathway leading to a higher educational level.

In 2001, the new government in office transferred all vocational adult training and education from the Ministry of Labour to the Ministry of Education and more specifically to department for VET. The objective of this merger was to create coherence within the total VET area for skilled and unskilled workers and additionally to improve credit systems.

In 2006, a new report from a commission, also with members from the government and the social partners, was prepared. The task of the commission was to analyse and assess the policy of adult professional training and education (CVET - continuous vocational and educational training).

The objectives of the policy were to create the foundation for lifelong learning, skills development for all individual on the Danish labour market. Two important and concrete political outcomes of this process were (1) the Danish Policy Paper on Lifelong Learning and (2) the Law of Recognition of Prior Learning.

Who was involved in the development?

Higher education:
As previously referred to, the Ministry of Science, Technology and Innovation has the overall authority of the process of credit systems. In preparing and setting up the Danish National Framework for Further and Higher Education other ministries participated, e.g. the Ministry of Culture and the Ministry of Education.

In all major policy areas, e.g. the Bologna process and the qualification framework cooperation with and inclusion of all relevant stakeholders is taking place. This is done through permanent councils/committees and by setting up reference groups. Stakeholders are:

- The Danish Evaluation Institute[17]
- The Danish Agency for International Education[18]
- The Universities
- Student organisations
- Labour Market Organisations
- The Danish conference of Rectors

IVET and adult education
The Danish VET system is defined by a high degree of stakeholder involvement and decentralisation and these features have considerable impact on how the credit award systems are implemented.

The Ministry of Education is the main responsible actor. In addition, the social partners are heavily involved in all levels of management and implementation of the VET system, both for initial training and for continuous vocational training for adults. Specific reference shall be made to the National Knowledge Centre for Validation of Prior Learning (VPL), which was set up in 200719. The objectives of the centre are to collect, produce and disseminate information and documentation of existing knowledge on VPL.

Other major stakeholders are:

- Other Ministries, e.g. Ministry of Labour
- Council for VET education
- Training committees for VET programmes
- Training committees for continuous professional development within VET
- Labour Market organisations
- VET colleges
- Associations of VET colleges
- Association of VET schools boards
- Student organisations
- The Danish Evaluation Institute
- The Danish Agency for International Education
- Municipality Guidance centres for young people under the age of 25

[17] www.eva.dk
[18] www.iu.dk
[19] www.nvr.nu

What additional procedures and processes were necessary to put the credit system into practice?

Higher education

For higher education, the Bologna process has had the following consequences in terms of adding procedures and processes:

- **Consequences for the curricula**:
  To describe the objective of the study programmes in outcome terms, e.g. knowledge, skills and competence.
- **Accreditation**:
  In future, all existing and new education programmes in higher education have to be assessed against predefined quality criteria as part of an accreditation process.
- **Certification of the qualification framework**
  The new qualification framework shall undergo a national self-certification process in order to document that the individual educational programme is compatible with the common European Educational Area, which was adopted in 2005 as an important component in the Bologna process. The aim is to secure genuine comparison and transparency.

IVET and adult education

Denmark has a long tradition for providing individual credit and validation to individual applicants. This was facilitated by clauses in the various educational orders e.g. Law of Vocational and Educational Training and Law of Adult Vocational Training. In that sense there was no need for additional procedures to put the credit system in place.

In line with the increasing focus on Globalisation and the growing risk for marginalisation of low skilled workers more attention was concentrated on systematised credit and validation procedures as means to boost to general educational level in Denmark.

For what purposes does the credit system mainly serve[20]?

Below follows the main educational and political motives for setting up credit award systems:

- Serve general labour market objectives to upgrade the skills of the labour force.
- To provide the individual with the best possible conditions to build upon his/her knowledge, skills and competences
- To be able to document and keep record of an individual's formal qualifications and qualifications based on prior learning
- To make better use of public resources and finances in the educational sector.
- To establish a fundament for a better interface between "the world of education" and "the world of work"

[20] Undervisningsministeriet 2007 –Danmarks strategi for livslang læring

SECTION 2. THE STUDY

According to the EU educational strategy VET is expected to play a key role in achieving the ambitious goals for lifelong learning and mobility. Key actions in VET to support lifelong learning and mobility shall focus on:

- flexible "a la carte" concepts to maximize the access to continuing VET delivered by employers, traditional training providers and higher education institutions and coupled with appropriate financial incentives
- genuinely open pathways from VET to HE and development of tertiary VET programs
- high degree of validation of non-formal and informal learning
- integrated guidance and counselling services to facilitate transitions and learning and career choices
- by 2020 systematic use of EQF, ECVET and Europass aimed at transparency of qualifications and portability of learning outcomes
- transnational mobility strategies at the level of VET providers facilitated to become appropriate mobility support structures.

The Danish perception of the main components of a Lifelong Learning strategy and implementation is in harmony with the above highlighted principles. In addition they constituted the fundament for this study and more specifically for the persons selected for interviews.

The scope of this study covered interviews with 15 persons representing different positions and organisations in the Danish educational system. List of persons interviewed is attached as annex 1.

In general terms, the persons interviewed represent two different groups in the Danish educational, primarily VET, system.

1. Stakeholders and decision makers on the political level involved in planning, deciding on and implementing educational policy activities, mainly within the VET area.
2. Persons, counsellor and supervisors, working with actual cases involving recognition and credit awarding procedures for students/learner applying for admittance to academy profession programmes and professional bachelor programmes.

Interviews with key stakeholders and decision makers

The aim of the interview was to get an overview and concrete feedback on how important stakeholders in the Danish educational system, primarily VET related, assess the EU objectives and procedures to promote a common description and understanding of qualification and hence promote mobility, e.g. NQF and ECVET.

The framework for the interviews focussed on the following four main areas/issues:

- Educational and labour- market driven forces to introduce NQF – objectives and procedures? Tools to support the process?
- The interviewees' assessment of the situation with regards to the implementation of NQF and ECVET? Resources to be deployed in this process?
- The interviewees' assessment of NQF and other campaigns launched to support lifelong learning and national mobility in the educational systems, e.g. the possibility to increase accreditation and recognition procedures.
- The interviewees' views on possible NQF perspectives in the context of increased mobility on an international level. Identification of possible impediments for mobility? The need to change procedures and the need for more/special resources to back up the political objectives.

- **Educational and labour- market driven forces to introduce NQF – objectives and procedures**

The stakeholders interviewed take different positions concerning the need to support and implement NQF in Denmark. The positions can be divided into three categories

- positive attitudes towards the initiatives
- impartial positions
- negative stances

Positive attitudes towards the initiatives

The Danish Confederation of Employers (DA) supports the concept and objectives behind the NQF. According to the DA representative EU has to focus more on quality, internationalisation and coordination of international systems. Denmark has a tradition to be reluctant, almost dismissive, to EU initiatives. During the last ten years this attitude has changed to a more positive direction.

Quotation from the interview:"If Denmark wants to attract foreign labour force to the country it requires mutual and cross national recognition of diplomas and certificates."

Impartial positions

The Danish Ministry of Education was, as highlighted below, the main responsible in the process of introducing and implementing NQF in Denmark and this of course reflected in their responses and comments.

The Ministry representative stresses the political objectives and the adamant EU commitment of creating a common qualification framework followed by the individual member states' procedures to implement the system.

The Ministry representative highlighted that Denmark almost managed to comply with the timetable set up by the Commission and mentioned that other countries compared to Denmark were far behind in the implementation process.

The interview with the Ministry representative was also touching the issue of NQF seen as both a labour market instrument and an educational tool for comparing qualifications on international and national scale.

The Interviewee was aware of the present framework for the discussions where the point of departure for and the focus of the discussions primarily have been issues dealing with discussions concerning the understanding and level of the eight levels in EQF framework and with less or almost no attention paid to the labour market aspect, e.g. NQF as a mobility supporting instrument. Still, the interviewee thinks that this perspective will gradually develop.

A representative from the Danish Agency for Universities and Internationalisation (IU) was also interviewed. The institute is the responsible authority for providing assessments of non-Danish degrees, diplomas and certificates and information about international recognition of qualifications.

As a Governmental institution IU is of course supporting the NQF implementing process in Denmark but at the same time the IU representative thinks that the VET system will be skeptical at the whole idea of NQF and especially ECVET.

Negative stances were expressed by representatives from the educational trade committees. Representatives from two committees were interviewed. At the same time it should be highlighted that it seems to be a general (negative) view among the Danish educational trade committees.

The interviewees expressed sceptics at the NQF initiatives. They think that the whole system description system is vague and further highlight that this stance originates from the period when the training committees participated in the project ot introduce ETCS points in the vocational system.

Quotation: “The question concerning driving factors is funny in the sense that the parties in the labour market neither had the motive nor the incentive to introduce and implement EQF. Simply, it was the Ministry (of Education) which took this decision and afterwards the task was handed over to the social partners which in turn was given the duty to implement it”.

- **The interviewees’ assessment of the situation with regards to the implementation of NQF and ECVET**

All person interviewed highlight the Denmark has complied with EU instructions and implemented the NQF almost in time and with a fully-fledged EQF concept description of all educations and modules in the Danish educational system.
Still the arguments differ according to the overall, positive or negative, perception of the how useful NQF will turn out to be.

“a lot of resources have been deployed in the process and the outcome has been very good” – the Danish Ministry of Education
“it has been implemented because the job had to be done. The resources, available for the process, were insufficient and we” (the educational trade committees).
“it has been done because it was a duty and the persons, who did it (representatives from the trade committees) had the feeling that they were doing it for the benefit of others”. Quotation from the interview with the representative from the Danish Confederation of Trade Unions.

- **The interviewees’ assessment of NQF and other campaigns launched to support lifelong learning and national mobility in the educational system**

As one could expect from the different attitudes to NQF, the feedback from the interviews varied to a great extent. Persons holding a positive view on NQF are confident that the framework, in the long perspective will contribute to lifelong learning. “NQF can turn out to be the instrument that can enhance the national mobility on the labour market”. Quotation from the representative from the Danish Confederation of Unions: “ We know that average age for electricians is 34 years and that 70% of the electricians after completion of their vocational training have left their trade and getting employed in other professions, e.g. IT. It could be interesting, with the NQF as a tool, to identify what specific learning outcomes/competences either promote or obstruct a transfer to other trades or to further education. Representatives from the trade committees don’t think that NQF will have a direct impact on lifelong learning. Quotation: “I actually don’t know to what extent the NQF can promote educational mobility. The VET profession flight mechanics is one of the very few professions on (NQF) level 5 and I don’t think that this fact will increase the likelihood that persons holding this certificate will continue in further or higher education.

In spite of their negative assessment of NQF, one representative from the trade committees although highlight how NQF can be seen as a quality assurance tool. Quotation: “If I was supposed to start up a new education/VET profession, I actually think that i would apply to NQF matrix. Then I would try to identify the learning outcomes and the point of departure should be the NQF definitions. Hence countries with no or less developed VET systems can take the advantage in using the EQF model as a framework/recipe for the work

The interviewees' views on possible NQF perspectives in the context of increased mobility on an international level

The representative from the Danish Agency for Universities and Internationalisation is confident that NQF, in the long perspective, will have a positive impact on the transnational mobility. The interview person compares with the ECTS points, which from the outset also was met with scepticism and reluctance.

The representative from the Ministry of Education was confident that NQF will improve and facilitate mobility of both apprentices and artisans. As an example, he referred to the wind mill industry where the huge Danish factory – Vestas – can use the framework when employing new workers.

Recognition and credit awarding procedures for students and learners applying for admittance to academy profession programmes and professional bachelor programmes

The focus in this section will be credit and recognition within the area of higher education and specifically the field of academy profession programs (2 years' duration) and professional bachelor programmes (3,5 years' duration).

The reason for concentrating on this area is that credits awarding and validation of prior learning within the VET areas is thoroughly described in other parts of this report. Another reason for focussing solely on this area is that the interviews conducted in this study can be compared with the findings in a review of procedures and practices in credit awarding in the two said educational pathways.[21]. Until now, this is the only Danish evaluation of credit transfers and procedures covering an entire educational sub-sector.

In total, 8 interviews were conducted. Four students and four counsellors. The names and study venues are attached in annex 1.

The interviews with counsellors focused on the following issues:

- In which area is the counsellor working?
- What is the typical story of a student applying for credit transfer to the new study?
- Opportunities for awarding credits?
- Obstructions for awarding credits?
- Recommendation for changes in the awarding system.

The interviews with the students focussed on the following issues:

- The study/educational pathway where the interviewee has applied for credit transfer?
- Documents, copies of diploma and other documentation that the applicant shall provide?
- Opportunities for awarding credits?
- Obstructions for awarding credits?

The issues highlighted below represent the essence of the interviews, which at the same time are in full correspondence with the findings in the scientific review already referred to:

- **Credits are given in the big majority of cases.**
  The review documents that credits, to some extent, are awarded in 95% of the cases where application are submitted. This is also in compliance with the 8 interviews conducted in this survey.

[21] EVA – 2010 – Merit på erhvervsakademiuddannelser og professions bachelor uddannelser. 2010

- **There is room for improvement**
  Interviews with both students and counsellors highlight that the practice and procedures change from institution to institution and from counsellor to counsellor. The institutions interpret the laws and evaluate credit matters differently.

- **Decentralised management**
  The lack of a uniform system is mainly explained by the decentralised management of credit transfer procedures.

- **Different interpretation in academic assessments**
  The review and the interviews also show that the academic assessments based on different interpretations of what preconditions must be met in order award credits.

- **Different understandings of what requirement to set up in order to obtain the necessary credits**
  Both the students interviewed in this study and findings in the scientific evaluation highlight that the applicants now and then are met with two understandings/answers to the same/specific question concerning award of credit for an explicit topic.

- **Students' rights are jeopardised**
  When credit procedures and practices are based on varying assumptions and understandings the students' legal rights are under threat which again can lead to inappropriate outcomes and understandings of the concept of credit awards.

SECTION 3. TERMINOLOGY

The educational system in Denmark is in general based on the principle and objective of learning outcomes. Laws, departmental orders and guidelines regulating the educational system generally describe qualifications by learning outcomes or competence objectives. The Danish concept of learning outcome describes what a person with a specific qualification is expected to know and be able to do, and not the learning input such as syllabus. However, the descriptions are often divided by subject, meaning that there is not always a comprehensive presentation of the overall learning outcome for the entire qualification.

For example, in general upper secondary education a reform came into force in 2005 in which a key element was a change in the course descriptions from content to learning outcomes and competence objectives. In vocational education and training, the student must comply with both defined learning outcomes and competence objectives in order to gain admission to the main course after the basic course, as well as to be awarded the certificates for the VET-programmes.

3.1 Credit transfer – Recognition procedures

Credit transfer – in Danish "merit" – means that parts of a student's learner's previous qualification are accredited towards replacing part of a new education programme. Credit transfer takes places in all educational systems beyond primary school[22], see illustration 1. In this paper focus will be on credit transfer in IVET and CVET.

Credit transfer in IVET: All students/apprentices, who start at a VET school, are obliged to/have a right to get their competences assessed within their first two weeks of school period. Teachers at

[22] In general secondary school credit transfer is very seldom

vocational schools must ensure that the competence assessments focus on every student's qualifications. The assessment can lead to either exemption from specific subjects/modules or extra training. The objective is to make the competence assessment realistic and relevant for each student and hence securing that the student can be provided with an educational pathway in compliance with learning outcomes specified in VET competence instructions.

Credit transfer for adults starting on IVET: Adult workers/employees can be awarded transfer of credit when he/she:

- possess relevant working place experiences and/or
- can document relevant training and/or
- has relevant courses within a specific trade and/or
- other relevant courses/training

Adults who want to get transfer of credits shall apply at the VET school, which also has the authority to award exemptions for theory modules/courses. The training trade committee responsible for VET profession is responsible for awarding exemption for parts of the practical training of the whole apprentice period.

3.2 Recognition of prior learning

Recognition of prior learning builds on the basic notion that an individual should not be made to learn the same thing twice, but should have the opportunity to use and build on his or her competences, irrespective of where and how they were acquired.

Since 2007, legislation relating to the recognition of prior learning has applied to the educational sectors: vocational education and training, single course subject; general adult education; general upper secondary education; basic adult education; adult vocational training programmes; academy profession degrees and diploma degrees in adult and further education.

The Danish concept for the recognition of prior learning - among other things - departs from the principle of learning outcomes, where the individual's competences are tested and assessed in relation to the learning outcomes of a particular programme. It is based on the principle that the individual's competences should be recognised, irrespective of where and how they were acquired, but without compromising the quality/standard of the education and training qualifications. The methods used must ensure a reliable assessment to secure confidence in the outcome, and the result of the assessment should be documented by issuing a certificate.

In the vocational education and training system, testing and assessing the student's prior learning is compulsory for all students within the first 14 days of all programmes. In the other educational sectors, the students have the right to ask an educational institution to assess their prior learning in order to obtain recognition for their competences. The legislation has also ensured that an individual can appeal against certain prior learning recognition decisions to the Qualifications Board.

The result of a prior learning assessment has to be documented by issuing 'documentation of admission', 'documentation of competence' or 'documentation of education'. 'Documentation of admission' can be used for basic adult education (GVU), academy profession degrees and diploma programmes.

'Documentation of competence' can be issued for all six education areas (vocational education and training, single course subject; general adult education; general upper secondary education; basic adult education; adult vocational training programmes; academy profession degrees and diploma

degrees in adult and further education), while 'documentation of education' can be issued for all areas apart from general adult education and general upper secondary subjects.

The recognition of prior learning gives the individual the following opportunities:

- to qualify for entering educational programmes at a higher level;
- to tailor educational programmes to take account of what they already know and are able to do or receive credit for certain classes;
- to obtain 'documentation of competence' if the skills are the same as those obtained by completing part of an educational programme;
- to obtain a 'programme certificate' if the skills are the same as those obtained by completing an entire educational programme.

3.3 Interface – VET and higher education

One of the Governments high profiled objectives is that 60% of a youth cohort shall complete a further education. With the growing search for secondary schools it is now almost 54% of a cohort that is expected to achieve a higher education. But at the same time, it must be ensured that a proportion of those, who complete a tertiary education, has working experiences from the labour market. If Denmark shall maintain workplaces within production it is crucial that more young people starting on a VET pathway are motivated to continue learning and studying after completion of VET.

On this background, much focus has been put on how VET can attract more students and especially skilled youngster committed and motivated to further education after finishing VET. The VET system has a flexible framework and a set-up which makes it possible to offer education on different levels and hence cater for applicants with different academic backgrounds.

In theory, it should be possible for the blacksmith to become an engineer and that an administrative assistant can study to become a finance controller or for the social heath care assistant to build on her/his existing education and end up as a nurse (in DK the nurse education is part of further education – bachelor). But the transfer from VET to further education is still very low.

Below follows the main findings and conclusions from a recently published survey concerning opportunities and barriers for further education among young people holding a VET degree/journeyman's test[23]:

- In 2001 601 VET graduates entered a higher education within a period of 27 months after completion of their VET pathway. In 2007 the corresponding figure was only 479. This is a very small share 1.6 % of a cohort. On the contrary, 7% of the continuous growing secondary school cohorts embark on a short academy professional study pathway.
- Among the young persons, who were covered by the survey, 3% of the cohort started on a short further education, mainly academy professions programs, within a period of 5 years after completion of a VET profession.
- 5,4 % of the cohort started on medium cycle further education (bachelor), pre-school and primary school teacher nurse educational pathways. The big majority in this segment is represented by young women.
- The preferred further educational medium cycle/bachelor pathways for young men are building technician and short cycle engineering studies.
- 20 % of the youngsters, who in the period 2001-2006 completed a VET profession, had already completed a general secondary education. This is double- education trend among

[23] AKF rapport: Muligheder og barrierer for videregående uddannelse blandt unge med en erhvervsuddannelse (EUD)- 2012

young persons has for a long period constituted a both structural and economic expensive problem in DK. The young person with this double education background has at the same time the highest inclination to embark on further education.

- The transfer percentages from VET to further education differ among the various VET pathways. The biggest transfer ratio to further education is observed in the VET family "Technology and Communication", e.g. electricians, who continue on further education. The transfer to further education is also high within the VET families "Cooking and catering", "Craft and Technique and "Service".

3.4 Strategies and means to improve to transfer from VET to higher education

Reference to the political objective of increasing the transfer from VET to further educations has been highlighted above. The survey, from which the above transfer figures have been presented, highlight that the following strategies/means should be observed in the Danish educational system

More equity among the VET pathways: The VET professions differ to a large extent in terms of transfer ratios to further education. Hence, there seems to be a need for considerations on how to motivate youngsters on the low ratio professions to embark on further education.

In addition, the stakeholders should scrutinize the possibilities to establish further – short cycle/bachelor pathways which build upon a specific VET profession/family.

Improve the recruitment to and the reputation of VET: If the transfer ratio from VET to higher education shall be increased there is an urgent need to change the educational hierarchy among youngsters and their family. The general secondary school, gymnasium, is seen as the best choice following primary school and this tradition and pattern of preference has to be changed.

Improve the awareness of possibilities within the VET system: Pupils in primary school should to a much larger extent be informed about the fact that a VET pathway can lead to much more that a specific profession.

Decisive to motivate the youngsters in choosing alternative educational pathways: The students at the VET schools/colleges have limited knowledge about the different opportunities a VET certificate can lead to. Hence, there is a huge need to extend and monitor in formation campaigns in order to focus on VET further education.

It is essential to continue studies after VET: Young people starting on a VET pathway are first and foremost motivated by the possibilities their training provides them with. On this ground, VET graduates can be motivated for further education when this is related to possibilities on the labour market, achieved by further education. The conclusions in the survey highlight that presentation of role models could be part of a motivation strategy.

SECTION 4. OPERATION

Below follow a number examples featuring a number of procedures involving crediting process and procedures for persons, who want to either go abroad in order to work or study or want to start on a new educational pathway and for that purpose would like to know to want extent prior learning either achieved from working experiences or from theoretical (school) courses can lead to transfer of credits and hence exemption from parts/modules in the new study.

The examples are fictitious but reflect actual situations which are taking place in reality.

4.1 The case of Hassan: Hassan is 22 years old and lives in Denmark since three years. How can his learning abroad be recognised?

Hassan shall address The Danish Agency for Universities and Internationalisation. It provides assessments of non-Danish degrees, diplomas and certificates and information about international recognition of qualifications. If Hassan wants to get admission to a VET school he shall observe the following procedures: Admission to a vocational education and training (VET) programme requires a minimum of 9 years of schooling equivalent to the Danish *folkeskole*.
Hassan may enter VET either at a vocational college or in the company where the practical, on-the-job training is to take place. He must have signed a training agreement with a business enterprise before on-the-job training begins.
Before admission, foreigners can take a Danish test at the college. In addition a counselor at the VET school will take Hassan through a competence clarification in order to assess if Hassan can get exemptions for modules or practical learning at a workplace.
If Hassan wants to study on a further educational institution, he shall meet the following requirements. His foreign certificate must be on a level with a Danish upper secondary school leaving certificate. For admission to an Academy Profession degree programme (short-cycle professional higher education) it may be sufficient that his foreign certificate is on a level with a relevant Danish vocational qualification. The Agency has a special page where Hassan can find out whether the level of his foreign certificate satisfies the general entry requirements: ”Foreign qualifications for entry to higher education”.

For upper secondary certificates from some countries, entry to Danish higher education requires that Hassan completes one year (or, in a certain cases two years) of higher education or equivalent supplementary studies in addition to the certificate.

If the information that Hassan want is not available under Foreign qualifications for entry to higher education, he can ask the educational institution where he wishes to apply or the Danish Agency for Universities and Internationalisation. If necessary, the Danish Agency for Universities and Internationalisation can make an assessment of Hassan’s qualification.

Specific entry requirements: Like applicants with Danish qualifications, Hassan must meet the specific entry requirements that apply to the individual study programme. Specific requirements typically include the level of the subjects passed, marks (grades) obtained in individual subjects and the overall average of marks (grade point average).Hassan is advised to ask the educational institution where he wishes to apply whether he fulfils the specific entry requirements. The educational institution may require that he takes supplementary courses

Language requirements: For programmes taught in Danish, Hassan must be able to document sufficient oral and written proficiency in Danish. He must meet such requirements by the beginning of the study programme.

4.2. The case of Pia: Pia is 19 years old. For two years she has been working on a voluntarily basis in a zoo and now she wants to be admitted in a VET college in order to become an animal keeper.

Animal keeper is a VET profession and as such a combination between theory at the school and practical training at a workplace. Pia can address one of the VET schools providing the VET animal keeper profession. All young people, who start on a VET pathway, are obliged to go through a competence assessment during the first 14 days of the school period. This will also apply for Pia. The competence test is supposed to identify the skills of the student and clarify the educational needs and conditions

of the applicant. The student's prior school certificates, theoretical test and employment combined with an interview and a practical test is included in the assessment.

Based on the outcome of the assessment the school will make a plan for Pia. The plan can imply exemptions from some of the theoretical courses if the school counselors assess that Pia's prior learning and experiences from the zoo can justify this. Exemption from parts of the practical training, e.g. shortening of the period at the workplace is up to the educational trade committee to decide. The decision is based on the substance of work Pia has delivered in volunteer working period.

4.3 The case of John: For ten years John has been working as a skilled plumber (VET profession certificate acquired). He wants to start his own business and for that purpose he needs to qualify as an authorized plumber, heating and sanitary engineer.

He addresses a counsellor at the local/regional VET college and receives information about a two year engineer education and specifications on how the duration of the programme can be shortened.

Collection and documentation of prior learning outcomes: The applicant collects:

- Education and training certificates from former schooling, education and continuous professional courses.
- Description and documentation of working experience and skills and competences within the plumbing sector
- Documentation for taking part in a management course arranged by a local sports club.

Application for admission to the sanitary engineer education

- Application for shortening of the education period
- Fill in skills/competence assessment scheme with documentation of qualifications and learning outcomes
- Guidance interview and skills assessment - 1 day duration
- Examination of assessment scheme and documentation materials
- Test in quality assurance, management and calculation
- Concluding conversation between counsellor and applicant

Recognition of John's prior learning outcomes: Validation and recognition of:

- IT -driver's licence (basic IT skills)
- Completed courses in the diploma course: organisation
- Working experiences and competences within the field of tendering, quality assurance and accounting
- Completed management course in the local sports club.

Outcome of validation process: John has to pay for these services, estimate 150 Euro. John will be awarded credits for specific subjects in the sanitary education equivalent to a shortening of 20 weeks of the total study period.

4.4 The case of Maja: Maja is 29 years old. For the last 9 years she used to work as skilled chemical laboratory. Are there mechanisms in the systems helping her to get her learning and experience credited towards studies?

In Denmark a chemical laboratory education is labelled a short further education belonging to the category: "Academy Profession Programmes" and the duration of the programme is 2,5 years, with theory and practical training. Maja can expect to get credits for the theory in her former education but no credits for the practical experiences both during her studies and from her employment.
There are no standard rules or procedures for the process of awarding credits from Academy Profession Programs and more specifically the chemistry diploma which Maja holds.
It will be the specific university, where Maja wants to get admitted, that decides to which extent she will get credits for theory modules from her former study.

4.5 The case of Curth: Curth is 23 years. At the stage of 16 he started training in order to become a mechanic. After 9 months of training he dropped out. Now he has decided to continue with VET. He wants to start training as a mechatronic – a qualification which is quite close to the mechanic – qualification. Does he have to start from the very beginning?

Curth can expect to get credit from his nine months' mechanic training. He is supposed to address one of the VET schools providing the VET mechatronic profession. All young people and adults, who start on a VET pathway, are obliged to go through a competence assessment during the first 14 days of the school period. This will also apply for Curth. The competence test is supposed to identify the skills of the students and clarify the educational needs and condition of the applicant.

The student's prior school certificates, theoretical test and employment combined with an interview and a practical test is included in the assessment. Curth can also expect to demonstrate his practical skills and competences in a workplace and conducted as a practical test.

Based on the outcome of the assessment the school will make a plan for Curth. The plan can lead to exemptions from some of the theoretical courses if the school counselors assess that Curth's prior learning and experiences from his mechanic training can justify this.

Exemption from parts of the practical training, e.g. shortening of the period at the workplace is up to the educational trade committee to decide. The decision is based on the substance of the work Curth has been doing, when he was a mechanic apprentice.

4.6 The case of Susan: Susan is 17 years. She lives in a structurally weak region where training places are scarce. There she has started a vocational training preparation measure in the field of "service, health and care". Though placements in a youth center and in a community center she has gained first experiences and now she wants to become a house keeper (a person who is managing the service and the catering of big public or private centers). Does she have to start from the very beginning with the training although she gained some experiences?

Susan can embark on one of two educational pathways:

1. VET in nutrition

2. Profession bachelor in nutrition

1 - VET in nutrition. Susan can apply for admittance to VET center offering the VET profession. All young people who start on a VET pathway are obliged to go through a competence assessment during the first 14 days of the school period. This will also apply for Susan. The competence test is supposed to identify the skills of the students and clarify the educational needs and condition of the applicant

Susan's prior school certificates, theoretical test and employment combined with an interview and a practical test is included in the assessment. Based on the outcome of the assessment the school will make a plan for Susan. The plan can lead to exemptions from some of the theoretical courses if the school counselors assess that Susan's prior learning and experiences from the placement are equivalent to similar modules/courses in the VET nutrition profession.

Exemption from parts of the practical training, e.g. shortening of the period at the workplace is up to the educational trade committee to decide. The decision is based on the substance of work Susan has delivered in her working periods. Most likely, Susan will not be awarded with a shortening of the practical part of the VET training.

2- Profession bachelor in nutrition: Susan can also chose to apply for admission to a university college offering the nutrition study. The study programme is 3,5 years and lead to a bachelor status.

To be admitted to a university college the applicant should either have a secondary high school diploma or a VET profession with equivalent content to the nutrition bachelor. Hence, Susan will most likely be admitted, maybe she has to pass some general subjects to qualify for admittance. Susan will not get any credits once admitted to this study.

4.7 The case of Marita: Marita is 39 years. At the age of 21 she completed a nurse education. She stopped work as a nurse 23 years old when she gave birth to her first child. Marita's husband is an artisan, skilled carpenter running his own company with three employees and an apprentice. During the last 16 years Marita has supported the company by doing book keeping and other administrative office work. Are there opportunities for Marita to get her experiences recognised?

Marita shall address a VET centres providing training/education within the commercial and administrative area in order to go through a validation/recognition test. Marita has to pay for these services, estimate 150 Euro.

Before addressing the VET centre Marita shall, thoroughly, describe her working experiences and with specification of what subjects/topics she has been working with. Part of the validation process can be a practical test, e.g. demonstrate skills within book keeping. Marita shall also bring documentation for completed courses, if any, during the period she has worked for her husband.

Based on the validation of Marita's working experiences and proofs of successful tests within relevant subjects, the VET centre/counsellor can decide to provide her with exemptions- credits if she decides to start on a VET profession within accounting or similar topics.

SECTION 5. EUROPEAN DISCUSSION/SPECIFIC CONTEXTS/PERSPECTIVES

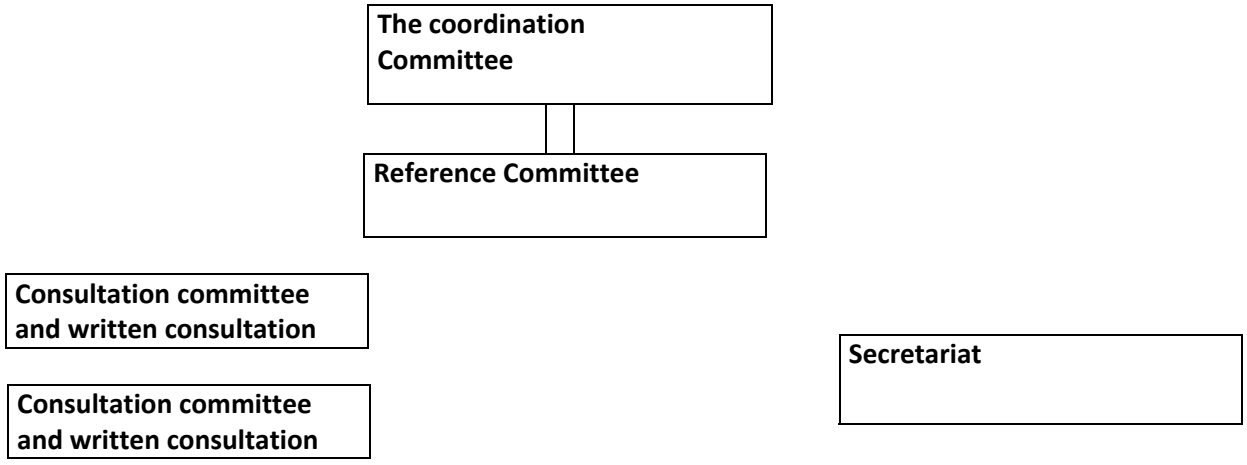
Introduction to NQF implementation in Denmark

In March 2005, it was decided to develop a National Qualification Framework in Denmark based on the Bologna Process. Hence, this part of the qualification framework identifies and describes the five levels, which can be achieved within the Danish system for further education. This process is taking place and in alignment with the general European Bologna framework for further education as well as the EQF. By the middle of 201O all public recognised degrees and education and training certificates in the Danish educational system should be classified in a national qualification framework (NQF). This has been achieved.

As to VET, a proposal for a qualification framework with a view of supporting categorisation and enhance recognition of vocational education was prepared in 2006. This took part as a follow up of the launching of the Danish strategy for globalisation. Here it was recommended that further activities concerning setting up qualification levels within VET should be coordinated and integrated with the on-going process of setting up a national (Danish) qualification framework. The EU conceptual framework for the initiatives is based on the fact that the implementation of ECVET is subject to voluntarily principles and reflecting that EU countries have different approaches of defining, naming and describing their qualifications. Hence EQF and ECVET shall be perceived and utilised as instruments to support transparency and mobility.

Denmark has chosen to set up a national qualification framework for lifelong learning parallel to the framework for further education. Consequently all the levels of EQF 1-8 will be included in the Danish framework for Lifelong Learning. On behalf of the ministries comprising the coordinating committee of the NQF, the Ministry of Education initiated the NQF referencing process to the EQF and formally requested the Danish Evaluation Institute (EVA) to organise and facilitate the process.

The referencing process in Denmark was organised in five tiers:



The coordinating committee, with representatives from the relevant ministries, held overall responsibility for the NQF referencing process. The ministries in question are:

- Ministry of Education
- Ministry of Science, Technology and Innovation
- Ministry of Culture
- Ministry of Economic and Business Affairs

The national referencing process ws conducted by a referencing committee. The main task of this committee was to verify how the NQF refers to the EQF. The referencing committee consisted of representatives from the relevant national authorities and agencies, as well as two international experts.

A consultation committee, comprised of key Danish stakeholders, was set up to engage stakeholders in the referencing process and to ensure co-responsibility for the referencing of the NQF and the EQF.

The consultation committee participated in a seminar where they were informed about the basis for the referencing process, and their input was integrated into the referencing process. To widen the engagement in the referencing process, the report was sent in written consultation to a broader audience of stakeholders.

A **national coordination point (NCP)** was established under the auspices of the Danish Agency for International Education by the four ministries (the national qualification authorities) represented in the NQF-coordinating committee. The tasks of the NCP, as foreseen in the EQF-recommendation, have in Denmark been divided between the coordinating committee and the NCP. The Danish Evaluation Institute served as a **secretariat** to the referencing committee and has drafted the final report.

Principles for NQF implementation

The Danish qualification framework for lifelong learning is meant to serve as a tool for description of both existing and new qualifications developed in the Danish educational system. Hence, the composition of the qualification framework takes the point of departure in the qualification structures, description models and pathways of the educational system. Against this background the NQF shall:

- **Include all public recognised qualifications**
  Qualifications in the framework shall be awarded pursuant to a law or a bylaw and subject to quality assurance by a public authority in the Danish educational system. Consequently, the framework will only include qualifications that are public recognised and hence subjected to a public recognised quality assurance system.

- **Take into consideration the diversities and development of the educational system**
  The Danish educational system includes a variety of educational programmes, institutions and stakeholders. Different objectives reflect different management systems and pedagogical procedures and shall be embraced by the qualification framework. The skills demands in the labour market and the educational structure change continuously and the framework should be able to adapt to this development.

- **Describe learning outcomes and pathways to achieve these**
  The qualifications on a specific level shall be described by learning outcomes. Each level describes the grades or certificates/diplomas that can be acquired and the general or specific entry requirements for the educational programme. By this the qualification framework will draw attention to educational pathways and options for lifelong learning and additionally support assessment and recognition of prior learning.

- **Correspond to the EQF, the qualification framework for further education and description systems in other educational programmes**
  In order to strengthen the transnational mobility the NQF shall refer to the European Qualification Framework. In addition, there shall be coherence with the qualification

framework for Higher Education and to the description systems in other Danish educational programmes.

- **Allocate for comparison of qualifications across national educational programmes**
  The fabric of the framework shall make it possible to categorise a qualification irrespective of in which part of the educational system the qualification has been acquired. This means, that the levels of the qualification framework should be defined/described in a simple and systematic way and at the same time covering all Danish educational pathways.

In alignment with EQF the Danish Framework uses 8 reference levels. Like in EQF, the key concept of the levels is the introduction of learning outcomes defined in terms of **knowledge, skills and competences.** This approach shifts the focus from input (lengths of a learning experience, type of institution) to the particular qualifications of a person and for what he/she is able to do (output).

Methodology for level descriptions

<table>
<tr><th>Knowledge</th><th>Skills</th><th>Competences</th></tr>
<tr><td>Nature and complexity
Consider if the knowledge is based upon theory or practice? Specify if it is knowledge within a subject, subject area or a trade? How complex is this knowledge?</td><td>Nature
Consider if the skills are practical, creative or communicative?</td><td>Space for action
In what kind of working-related or study context can knowledge and skills be activated?</td></tr>
<tr><td rowspan="2">Understanding
To what extent can the knowledge be put into a context?</td><td rowspan="2">Problem solving
The extent of the level's complexity in relation to the ability to assess and select knowledge?</td><td rowspan="2">Cooperation and responsibility
To what extent can one be responsible for both own and others' work? The complexity of working relations that one can enter into?</td></tr>
<tr><td rowspan="2">Communication
Which target groups can be reached In terms of communication and what is the complexity of the communication and what means are applied to in the communication process?</td></tr>
<tr><td></td><td>Learning
To what extent can one take responsibility for own learning and competence development?</td></tr>
</table>

Two principles are adhered to when qualifications are categorized in the Danish Qualification Framework for Lifelong Learning vis-a-vis EQF categorisations:

"The full-fit-principle" and "The best-fit-principle"

The full-fit-principle

The framework for lifelong learning operates with both the terms degrees and education/training certificates. "The full-fit-principle" refers to degrees within the area of further education and is defined in the general Danish framework for further education and the degrees included are Academy Profession Degrees, Bachelor, Master and PhD. In addition, these educations are included in the Danish system for accreditation and quality assurance and are directly transferred to levels 5-8. As to

level 5 this is a kind of grey zone area between the "fuli-fit-principle" and "the best-fit-principle". See more below.

The best-fit-principle

The best-fit-principle refers to education/training certificates and applies to the rest of the educational system. The classifying of education/training certificates is based on the principle that full match between the outcome of the specific qualification/profession and the general principles for the level specification in the framework is not necessarily in place. "The Best-fit-principle" is also used when certificates for supplementary qualifications achieved by continuing education.

The classification of the Danish Vocational System

All public recognised degrees and education and training certificates in the Danish educational system should be classified before the end of 2010. The VET programmes are part of the implementation and the stakeholders have completed the classification process of the approximately 125 programmes.

The process took place within the overall management framework of the Danish VET system – the dual system – which involves distribution of authority between the Ministry of Education and the social partners (trade committees). More specifically the Ministry was responsible for the general framework e.g. management, structure and objectives of the programmes and the trade committees lay down the detailed content of their specific education and training programme.

This set-up obviously called for a close cooperation between the Ministry of Education and the trade committees, a cooperation which is deeply rooted, long lasting and effective, and thus well suited for the implementation of the NQF and the ECVET activities to come. Although the long tradition for cooperation, this process was not seen so positive by all stakeholders, especially the educational trade committees, as referred to above in section 2.

The trade committees for the various trades have finalised the process of classifying the VET programs with the following three tasks:

1. Classify the VET programme in the NQF framework
2. Describe the programme
3. Change the certificates for the journeyman test to assure that NQF levels are included in the description.

It is already mentioned that concept of competence is perceived and used in different ways in the NQF and in the VET programmes. This challenge is dealt with by using the **"best-fit-principle"** (as referred to above) and in accordance with the following two assumptions:

All professions and their specialisations are expressed as final learning outcomes achieved by the combination of school education and workplace training. The NQF level shall be decided by breaking down the final learning outcomes into: knowledge, skills or competences and in way that a learning outcome can include more than one of the three specifications.

The approach is demonstrated below by using a few of the many competence areas/objectives (NQF) - learning outcomes (EQF) from a VET profession mentioned above – the Joiner/ cabinetmaker

Learning outcome/competence area – joiner/cabinetmaker	NQF level
1. Set up, operate and maintain commonly used hand- tools, electrical tools and standard machines either in, the workplace or on the construction site	Level 3 Skills
2. Carry out measurement, assembling and erection of pre-fabricated indoor staircases in building of apartments in compliance with environmental procedures	Level 4 Skills
3. In cooperation with others solve problems linked to sketching, documentation and planning of production of a seat-furniture	Level 4 Competence
4. In cooperation with others solve problems linked to sketching, documentation and planning of production of a seat-furniture	Level 4 Skills/knowledge
5. Use and understand a foreign language in work and societal relations	Level 4 Skills
6. Make analyses by using electronic drawings and calculation and carry out design works taking into consideration relevant topics within the trade and including styles from craft, architecture and industrial design.	Level 5 Skills

The above extracts document only a part of the total scheme for all competence areas/learning outcomes in the Danish VET joiner/cabinetmaker profession and by making use of the "Best-fit principle".

The expression best-fit implicates that discretion to some extent will take place when the classification takes place and that the definitions in the true sense – as defined in the EQF/NQF terms – not necessarily will be the case in the transfer of VET qualifications.

As one can see from the extract above level 3, 4 and 5 are represented. As the Trade Committees have just started the process of applying their competence framework to the NQF context, there is no general overview of the situation. Still it is expected that the VET professions in general will score high on "skills" and "competences" while "knowledge" in some cases will obtain a lower score. Additionally it was foreseen that the majority of the "scores" will be on level 4, some on level 3 and few on level 5 as indicated in the scheme above. This has also turned out to be the case.
Following the classification of the VET professions, the trade committees have included the NQF levels in the certificates.

Specific attention should be paid to the journeyman's test which is the final examination for all the technical trades in Denmark. The test is designed to determine whether or not an individual possesses the knowledge, skills and competences necessary to work as a certified craftsman within the specific trade. Besides being the final test it also involves assessors from the trade itself, usually one representative from labour organisations and one from employers' organisation. This certificate shall also be labelled according to the NQF.

ECVET in Denmark
First of all it should be emphasized that the ECVET implementation in Denmark is still in an embryonic phase. As outlined above, the Danish Educational Trade Committees supported by the Ministry of Education have just finalised the process of categorising and grading the learning outcomes into the NQF template.

Most likely the ECVET implementation will speed up when all the VET professions have finalised the NQF categorisation. Up till now Danish ECVET experiences have been achieved via participation in some/few of the many EU Leonardo ECVET pilot projects.

Specific reference shall be made to one of the projects "Painting skills comparison. The project had partners from Denmark, Germany, ltaly, Norway, UK and Spain. Like in other projects the partners encountered problems and challenges in comparing and recognising the ether countries' systems and approaches. In spite of this, the project succeeded in setting up common EQF descriptors for the painting trade and a proposal on how the ECVET can be integrated into the painting trade. Still the project faced some problems in using the ECVET credit points and hence invented its own point system.

Annex 1: List of persons interviewed:

Benedikte Sølberg – Senior Consultant	Industriens Uddannelser – Secretariat for educational VET professions within the industry
Benny Mølgaard – Counsellor	VET college Aarhus
Henning Gade – Vice- director	Danish Confederation of Danish Employers
Eva Bruselius - Counsellor	University college Metropol
Jan Reitz Jørgensen – Chief Consultant	The Ministry of Education
Lea Clausen - Counsellor	VET college Copenhagen
Louise - Student	Student at University College Metropol
Martina Andersen - Student	Student at the Syddansk University
Nils Kruse – Senior Consultant	Ministry of Science, Innovation and higher education
Niels Håkonson - President	Danish confederation of painters
Morten Smistrup – Senior Consultant	Danish Confederation of unions
Ole Draborg - Manager	Employers Association for painters
Per Clausen – Head of unit	The secretariat for educational training committees with in the commercial area.
Poul Monggaard- President	President for the hairdressers' union in Denmark
Søren Hansen – Counsellor	TEC – Copenhagen – VET College

Credit-Systems for Lifelong Learning, CS3L

Country Background Germany

Christiane Eberhardt
Federal Institute for Vocational Education and Training

I Introduction

The authors of the Data Report to accompany the 2011 Report on Vocational Education and Training point out that permeability is an "urgent future task", which can only be achieved if the educational system offers transparent and permeable pathways in overall terms, i.e. when *"all further educational pathways and qualifications are open in principle and remain achievable in every phase of education"* (DATA REPORT TO ACCOMPANY THE 2011 REPORT ON VOCATIONAL EDUCATION AND TRAINING, p. 379). This is not currently the case. The field of activity of "credit transfer" is accorded an important role when the focus is on facilitating access and transitions between the pillars of the German educational system and in the vocational education and training system itself.

The creation of credit transfer and recognition mechanisms is not, however, merely being promoted within a German context. This is something which is also being driven forwards with verve on the European agenda. It is generally referred to by the term "credit system" and is firmly anchored in both the Bologna and the Copenhagen Processes, of which it forms an essential part. At present in Europe, the term "credit system" is exclusively associated with the instruments ECTS (for the institutes of higher education) and ECVET (for vocational education and training. Both these instruments represent constructs that are linked with a special concept (structuring of qualifications via units) and a specific application context (accumulation of units to form an overall qualification). Credit transfer and recognition are also constructs in the German context, but differ from the European context with regard to the underlying concept. The Vocational Training Act (BBiG) contains a series of paragraphs that permit the credit transfer of learning achievements from other contexts. The main focus of the procedures and of the BBIG itself is on the acquisition of a recognised training occupation in the dual system. This approach is commensurate with the European definition of "qualification" as *"the formal result of an assessment and validation process during the course of which the respectively competent institution has ascertained that a person's individual learning outcomes comply with standards which have been stipulated"* (EUROPEAN COMMISSION 2009, C 155/14). The "standards which have been stipulated" are met when the final examination in a recognised training occupation is successfully completed. The BBIG does not provide for the acquisition of certified partial qualifications (which can be exploited on the labour market) or for the accumulation of learning achievements that effectively lead to a recognised training qualification without a final examination, the latter being something that is strongly promoted on the European side.

The definition of "credit system" formulated within the project as "credit transfer and recognition procedures that are directed at facilitating access and transitions within the educational system and/or at shortening periods of education and training" is, therefore, ambiguous and unusual within the German context for the following reasons.

a) The term "credits" is equated with the ECTS used at institutes of higher education and with a modular structure in vocational education and training.

b) The established procedures for credit transfer and recognition are not perceived as a "system".

c) The concepts of credit transfer and recognition in accordance with the respective partial educational system represented by the interview partners deviate from one another.

In Germany, there is no credit transfer "system" that extends across educational areas. There are (statutorily) regulated procedures for the credit transfer of learning achievements that are firmly established within their respective reference systems (vocational education and training, higher education, advanced vocational training). Although the processes are legally regulated, relatively little use is made of them. Evidence of the equivalence of learning achievements is required in order for credit transfer mechanisms to take effect between the various reference systems. This is the basis of the trust that needs to be created between the stakeholders in the various educational areas. Credit transfer procedures only take place at the application of the persons involved (those whose learning achievements are to be credited and the person who is to take the decision). For this reason, credit transfer in Germany largely takes place flexibly and in a manner aligned towards the respective requirements of the companies. This permits the conclusion that the question regarding credit transfer also needs to be answered in the light of the respective economic development situation rather than merely against the background of lifelong learning.

II The study

The CS3L Project "Credit Systems for Lifelong Learning" was implemented with partners from Scotland (University of Edinburgh), the Netherlands (Cofora Arnheim) and Denmark (Metropol NCE). The German part of the study was lead managed by BIBB. The main focus of the project was on procedures, models and, where relevant, systems which are used in the countries participating in the study for the description, evaluation/monitoring, documentation and credit transfer of learning outcomes. A further objective was to identify how these procedures are implemented in practice, how they are used and which effects are achieved at selected interfaces in the system.

The CS3L Project was designed as an exploratory study which was aligned towards reconstructing influencing factors and mechanisms of credit systems/credit transfer models in the participating countries. The first phase of research, which was characterised by a (hermeneutic) approach towards the basic methodological and conceptual principles and the prevailing framework conditions of credit transfer models in the countries, resulted in four country reports. These reflect the current status of credit transfer or of credit systems in the countries (inventory).[24]

More detail was added to this initial overview via expert interviews. Interviews were conducted with experts[25] from policy, practice, administration and research who have a relevant involvement in the topic in the participating countries. The interviews were aimed at gaining knowledge of the actual implementation of existing credit transfer procedures and of the benefits and effectiveness at the defined interfaces of „access" and "transition" from an expert point of view. This process was based on a working definition of the term "credit system", which was presented to the interview partners and could be used in all countries involved in the project (regardless of whether a credit system has been introduced, as in Scotland, of whether statutory regulations provide for credit transfer, as in Germany, or of whether competence assessment procedures are practised, as is the case in Denmark and the Netherlands). Credit systems were understood to be credit transfer and recognition procedures that are directed at facilitating access and transitions within the educational system and/or at shortening periods of education and training.

In overall terms, the persons interviewed can be ascribed to at least one of the following groups.

- Persons whose function involves contributing to the structuring of vocational education and training policy in various committees and panels

[24] Available for download at http://www.bibb.de/de/wlk51057.htm

[25] Persons who have acquired expert knowledge of the relevant facts and circumstances because of their involvement were considered to be "experts" (GLÄSER/LAUDEL, 2009).

- Persons who participate in the implementation and execution of procedures and models aimed at credit transfer

- Persons who could have a potential interest in credit transfer procedures and are able to report on implementation in practice

- Persons who back up and reflect upon current European and national debates and initiatives from the point of view of (evaluation) research

28 interviews were conducted for the Germany Country Study. The interview partners represented were as follows.

- Federal Government and federal state ministries (3 persons)

- Umbrella organisation of the competent bodies, the trade unions and employers' associations (7)

- Training providers from the chambers, regional trade and industry and the federal state (6)

- Universities and Universities of Applied Sciences (4, including 2 "Bologna Promoters")

- Competent bodies and trade unions with responsibility at a regional level (5)

- Persons who had experience with the evaluation or implementation of programmes and initiatives aimed at improving credit transfer in the German system (ANKOM, DECVET, Connect, IT Continuing Training System) were also interviewed.

The interview phase took place during 2011/2012 in all four countries. An interview guide tailored to the specific national facts and circumstances was deployed. Joint "interview modules" (thematic blocks), which were addressed by all experts in the four countries, were agreed in advance. These encompassed questions on underlying terminology used, on procedures and their implementation and on lifelong learning.

Against this background, the interviews conducted within the scope of the CS3L Project focused on several question areas.

(1) Existing opportunities for credit transfer.

   a. The aim was to identify whether there is awareness of the possibilities for credit transfer in accordance with the Vocational Training Act (BBIG). A further objective was to evaluate such possibilities for credit transfer with regard to their underlying principles (what is actually credited?), their feasibility of implementation (what is the nature of the procedures?) and their effectiveness (what is the demand for the procedures?).

   b. The aim was to ascertain whether the existing possibilities are sufficient and productive in terms of creating access and transitions in the training system.

   c. The aim was to identify the extent to which existing procedures achieve the objectives associated with a working definition of "credit system" stipulated by us.

(2) Current national and European approaches towards improving credit transfer.

   a. The aim was to identify whether there is awareness of the initiatives.

   b. The aim was to identify how the underlying principles are evaluated and how the area of conflict with the German vocational education and training system is assessed.

   c. The aim was to identify which reservations and/or options are associated with approaches towards the credit transfer of competences located outside the existing statutory possibilities.

(3) The thematic field of "credit transfer" in general terms

   a. The aim was to identify what is understood by the term "credit transfer" and within which context it is used together with/equated with "recognition".

   b. The aim was to identify whether a correlation between credit transfer and permeability is perceived and at which points this emerges.

   c. The aim was to identify the nature of typical ideal procedures and the methodological principles on which they should be based.

We present the Germany Country Study below, in which the results from both research phases are synthesised.

III General conditions – credit transfer in Germany

Vocational education and training in Germany is characterised by a series of principles. The tensions between European targets and the conditions of the national system are clearly brought to light when the main focus of study is directed to the constitutive elements of German VET – the "concept of the recognised occupation" and "dualities". Whereas the concept of "dualities" calls attention to the steering mechanisms for the organisation of vocational education, the "concept of the recognised occupation" makes reference to the underlying design principles and the structure of qualifications.

The principle of the recognised occupation (*Berufsprinzip*) refers to "*a universal principle for the regulation of initial vocational training content and qualification standards"* (REULING, 2000). It is anchored in the Vocational Training Act (*Berufsbildungsgesetz*, BBiG) [26]and expressed in the form of recognised training occupations. Recognised occupations" (Berufe) are both education-related and employment-related constructs (BENNER 1995 in REULING 2000), which structure and regulate the labour market. Vocational education and training is geared towards securing the educational process aimed at the achievement of all-round "occupational proficiency" (*berufliche Handlungsfähigkeit*) and taking trainees/learners through to final certification in a recognised training occupation. It is this objective, i.e. obtaining a recognised occupation and being awarded the status of a skilled worker or employee, to which German VET (including all four (sub)sectors) is dedicated. Under the terms of the Vocational Training Act, the concept of "vocational education and training" comprises the areas of vocational preparation, initial vocational training, advanced vocational training and vocational retraining. The objective of each area is described in Section 1, Paragraphs 1-4, BBiG.

[26] Vocational Training Act (BBiG) of 23 March 2005 (Federal Law Gazette, BGBl., I p.931, last amended by Article 9b of the Law of 7 September 2007 (BGBl. I p. 2246)

- **Vocational preparation** aims to impart basic skills for the acquisition of occupational proficiency and thus facilitate placement in initial vocational training.

- **Initial vocational training** imparts, through a systematic training programme, the skills, knowledge and capabilities (occupational proficiency) necessary in order to engage in a qualified occupational activity in a changing world of work. It also enables trainees to gain the requisite occupational experience.

- **Advanced vocational training** enables individuals to maintain, update and/or broaden their occupational proficiency with a view to career advancement.

- **Retraining** aims to qualify individuals for work in a different occupation.

The Vocational Training Act and the Crafts and Trades Regulation Code (*Handwerksordnung*, HwO) govern initial vocational education and training under the dual system in Germany. In discussions at the European level, "dual system initial vocational education and training" is often shortened to "in-company and school-based training". The designation "dual" does not, however, refer just to the learning venues but also (and especially) to the steering of policy and the associated responsibilities. "Dualities" are also apparent in respect of the legislative foundations, financing issues, the design of the content, and the oversight of initial vocational education and training.

- At Federal Government level, the Federal Ministry of Education and Research (BMBF) is the department that is responsible for the basic principles and coordination of vocational education and training. Other federal ministries (specialist ministries) also issue ordinances which are agreed with the BMBF. Regulations from other federal ministries may only be enacted with the approval of the BMBF. Representatives of employers and employees organisations, the German Länder and the federal government work jointly on the Board of the Federal Institute for Vocational Education and Training (BIBB) [27] to agree the necessary resolutions. The Standing Conference of the Ministers of Education and Cultural Affairs of the Länder of the Federal Republic of Germany (*Kultusministerkonferenz*, KMK) is a consortium of the ministers or senators of the federal states responsible for education and schooling, institutes of higher education and research and cultural affairs. It was established in 1948. German Basic Law stipulates that responsibility for education and culture essentially lies with the federal states. In the KMK, the federal states ensure the necessary measure of cross-state commonality in education, science and culture. At the same time, the KMK is an instrument of cooperation in a spirit of partnership between the federal states and the Federal Government in areas such as vocational education and training. Regulation of training in companies is a matter for the Federal Government, whereas school-based vocational education and training falls within the remit of the federal states.

- Represented by their Ministries of Education and Cultural Affairs, the federal states are responsible for general and vocational schools at **federal state level**. Cooperation between the federal states (responsible for the vocational schools) and the Federal Government (responsible for the company-based side of training) is coordinated in the KMK. The federal states are advised on VET issues at federal state (Land) level by their own vocational training committees made up of delegates from the social partners.

[27] The existence of the Board is governed by § 92 of the Vocational Training Act. Its tasks include deciding upon the affairs of the Federal Institute for Vocational Education and Training, advising the Federal Government in fundamental issues relating to vocational education and training, determining BIBB's annual research programme and issuing recommendations for the uniform application of the Vocational Training Act.

- **At regional/district level**, the self-administrative organs of industry, and specifically the competent bodies, have important training functions and responsibilities.
    - They advise the companies providing training and monitor whether initial vocational training is being carried out in accordance with the law.
    - They maintain the "apprentice roll", which is the register of all training contracts.
    - They appoint boards of examiners made up of appointees from the social partners to conduct the intermediate and final examinations for initial and advanced vocational training qualifications.

The diversity of stakeholders increases further when education and training subsectors outside the dual system are taken into consideration (such as full-time school-based initial vocational training, adult education, continuing education and higher education are provided by the federal states under their own responsibility).

Accordingly, German VET is characterised by a large number of stakeholder constellations in which – depending on subsector (vocational preparation, initial vocational training, advanced vocational training, retraining, and full-time school-based education) – different objectives and tasks have evolved. The respective interests and reference systems as well as the underlying quality criteria and standards prove relevant to the question of applying European targets in the national context.

In Germany, any attempt to address the issue of whether, and if yes, how a credit transfer of competences can take place within and/or between educational (sub) systems, needs to be located in the context of the debate surrounding permeability. In the last decade, this discussion has been further driven by the key European educational policy concept of lifelong learning. The creation of transitions which provide connectivity right across Europe via transparency and the possibility of crediting prior learning and learning that has been demonstrated became an item on the national policy agenda, one of the consequences of which was the development of the German Qualifications Framework.

The call for greater permeability is, however, not new. It has its basis in the German educational system, which is characterised by its "pillarisation" (general education, vocational education and training, higher education). A glance back in time shows that fundamental reforms were called for as long ago as the 1960's. In the 1970's, these then led to a concept for an educational system based on permeability. The reform intentions were, however, put on ice. The reason given was the high cost involved (DATA REPORT TO ACCOMPANY THE 2011, 2012 REPORT ON VOCATIONAL EDUCATION AND TRAINING 2011, p. 367).

Improved transitions from vocational to higher education were constantly formulated over the decades. Whereas during the 1960's these tended to be motivated by labour market policy, the main focus of discussion during the 1980's and 1990's was on educational policy motives (MUCKE 2004, p.5). Systemic interconnections are, however, not only lacking between the pillars of the educational system. The same applies to vocational education and training, which is characterised by differentiations according to learning venues (vocational or dual), function (vocational training preparation, acquisition of a vocational qualification, retraining), financing (state, private sector or via labour administration funding) and area of responsibility (Federal Government or federal states) (DATA REPORT TO ACCOMPANY THE 2011, 2012 REPORT ON VOCATIONAL EDUCATION AND TRAINING 2011, p. 202). Although career pathway concepts that permit "progressions" from vocational education and training to upgrading training or an academic degree, and "switches" between educational and training pathways and provision are possible in principle, they are characterised by structural obstacles.

The lack of permeability between individual educational and development pathways is the subject of a great number of publications (e.g. FROMMBERGER 2009, MUCKE 2004), recommendations (BOARD OF THE FEDERAL INSTITUTE FOR VOCATIONAL EDUCATION AND TRAINING 1984 and 2010) and educational policy initiatives. These are closely related to the political revival of the theme, which picked up new tail-wind in view of the "demographic, economic, technological and educational policy challenges" (BMBF 2007, p. 11) and culminated in 2007 in "11 Guidelines for the Modernization and Structural Improvement of Vocational Education and Training" (BMBF 2007). At the core of this agenda-setting paper, improved permeability is strongly linked with the existence of credit transfer and recognition opportunities at the interfaces in the German education system, and with broader implementation of the opportunities already provided under the Vocational Training Act (BMBF 2007).

Credit transfer is a matter that is anchored in the Vocational Training Act (BBiG), as reformed in 2005. It is mentioned explicitly in Section 7, BBiG (Crediting of Previous Vocational Education and Training towards the Period of Initial Training).

In addition, the Vocational Training Act contains other paragraphs which regulate one of the objectives of credit transfer, namely shortening of the length of initial vocational training[28] These provisions are as follows.

- (§ 5 Paragraph 4 (transfer of credit for initial training in another relevant occupation)
- (§ 8 Paragraph 1 (reduction of the period of initial vocational training based on work experience, previous periods of initial vocational training, previous school-based education or by part-time initial vocational training)
- § 45 Paragraph 1 (reduction of the training period through early admission to the final examination).

A further objective of credit transfer (admission to examinations) is regulated in

- (§ 43 Paragraph 2 (admission to the final examination for persons who have undergone initial training at a vocational school or other vocational training facility if the qualification obtained corresponds to initial training for a recognised training occupation) and
- (§ 45 Paragraph 2 (admission to the final examination based on evidence of employment experience, initial training in a relevant training occupation, or other credible demonstration of occupational proficiency).

In this regard, Section 2 Paragraph 3 BBiG opens up the possibility that up to one-quarter of the total duration of training specified in the initial training regulations may be completed abroad if this serves the purpose of training, i.e. in the case of period of training of three years a total of up to nine months may be spent abroad. Phases of training to be undertaken abroad are to be notified to the competent body and incorporated into the training contract. The periods spent abroad are thus effectively credited towards the initial vocational training period and made an integral component of initial vocational training. For the duration of the periods spent abroad, trainees must apply to their part-time vocational school for leave of absence from mandatory vocational-school attendance. Trainees must catch up on the vocational school material they have missed in their own time (cf. WURSTER 2005).

[28] While some commentaries on the Vocational Training Act prefer to differentiate between "credit transfer" and "time reduction" based on whether a time reduction takes place at the start of, during or towards the end of initial vocational training, the fact remains that both mechanisms serve to reduce the overall length of the initial vocational training period.

Although the facility for credit transfer is created by statutory provision in the Vocational Training Act, policymakers and academic researchers complain of the lack of transitions between prevocational training and initial vocational training, between school-based and dual system forms of training, between initial and continuing vocational education and training, and between vocational education and access to higher education in addition to the lack of mechanisms for the recognition of informal learning (BMBF 2007, BROSI 2004, MUCKE 2004, HERBST 2004 et al.). The support initiatives set up by the Federal government in mid-2000 such as "JOBSTARTER connect" and DECVET have always been geared towards mapping potentials for this kind of credit transfer in the vocational education sector and facilitating access and transitions into the education system or towards a vocational qualification, especially by developing and testing modular qualification units/training modules and/or making active use of existing Vocational Training Act provisions.

In the pilot initiatives "JOBSTARTER connect" and DECVET, credit transfer for competences is tied to the existence of modular qualification units. Evidence that the competences/learning outcomes achieved in the unit of qualification are eligible for credit is either provided on the basis of individually performed equivalence comparisons (DECVET units of learning outcomes) or else on a methodological-didactic basis whereby the units are derived from the qualification profiles of the receiving system (training modules). Currently it is still unclear to what extent initiatives have succeeded in fulfilling the expectations levelled at them. Final evaluations have still to take place. Interim results and project experience gained from DECVET (www.decvet.net) support the view that structural barriers remain very high – irrespective of the fact that the pilot projects yielded evidence of credit-transfer potential between the interfaces by various routes.[29] It will be a challenge to draw out the developed models and procedures for credit transfer at the defined interfaces from the project context and to transfer them regionally and/or sectorally or generalise them for the entire system of vocational education and training. The supposition is that progress is likely to depend more upon political will than on the actual feasibility of implementation.

IV Understanding (terminology)

The main focus of the CS3L Project is on credit systems. Credit systems are ascribed the function of enabling transparency, comparability, transferability and mutual recognition of certified learning and attainment, and contributing to improved permeability (LE MOUILLOUR / JONES / SELLIN 2003; LE MOUILLOUR 2006). The European initiatives aimed at introducing credit systems (the two major initiatives being ECTS and ECVET) give prominence to policy principles (i.e. the award of credits and the accumulation of certified learning outcomes). A "credit system" is understood as:

> *"an instrument designed to enable accumulation of learning outcomes gained in formal, non-formal and/or informal settings, and facilitate their transfer from one setting to another for validation and recognition. A credit system can be designed by describing an education or training programme and attaching points (credits) to its components (modules, courses, placements, dissertation work, etc.); or – by describing a qualification using learning outcomes units and attaching credit points to every unit"* (CEDEFOP, 2008).

The German translation renders "credit system" not as "credit transfer system" (*Anrechnungssystem)* but as a "credit points system" *(Leistungspunktesystem)*. Otherwise it follows the English version. To this extent, the term "credit system" denotes a construct which is associated with a special concept and a specific context of application. The terms "credit transfer" and "recognition" also represent constructs in Germany. The concepts associated with them and the respective understanding of what

[29] This aspect was particularly addressed at the concluding DECVET event. The presentations on potential for credit transfer at the interfaces within vocational education and training are available for download at http://www.decvet.net/de/Fachtagungen/Abschlusstagung/site__379/ .

constitutes credit transfer and recognition differ depending on perspective and institutional affiliation. They are often used as synonyms without any kind of clear delineation. Our focus in the CS3L Project was to find out how the terms "credit transfer" and "recognition", which are accorded a central role in the improvement of permeability in the German educational system, are populated by the interview partners. What precisely is associated with "recognition" and "credit transfer"?

An interpretation of "recognition" and "credit transfer" is found in the Vocational Training Act. In this context, "recognition" relates solely to the training occupations as such (§ 4, BBIG). Training occupations are deemed to be recognised if they have been enacted via a legal ordinance from the Federal Ministry of Economics and Technology and with the agreement of the Federal Ministry of Education and Research. If an occupation is state recognised, training may only take place in accordance with the training regulations. "Credit transfer", on the other hand, refers to periods which are transferred in whole or in part to the time of training in recognised training occupations. Consideration needs to be accorded to the "maximum permissible transfer periods" in this regard (§ 7, BBIG). This understanding closely aligned to the Vocational Training Act (BBiG) and the Crafts and Trades Regulation Code (HwO) is also reflected in a number of interviews.

> *"I always understand credit transfer as something which is time regulated, i.e. as under Sections 7 and 8 of the BBiG (…) Recognition is really something like the question of admission to the external examination, so that it can actually be said on the basis of certain criteria that someone who has this and the skills or has completed certificates or training modules has the right to take an examination to acquire a VET qualification or to begin a course of higher education study. Recognition does not, however, automatically equate to time advantages"* (Mr. H, 00:09: 08-6).

The majority of interviewees define recognition as a legal act, as a consequence of which a title or vocational certificate is awarded. Recognition *(Anerkennung)* is therefore also used synonymously with the terms "confirmation" *(Bestätigung)*, "correspondence" *(Entsprechung)*, "allocation of a title" *(Zuweisung)* and "equal treatment"*(Gleichstellung).*

> *"Recognition is not, from my point of view, an arbitrary term. I would only see recognition in terms of state recognition. If it is state-recognised, then there is a corresponding statutory framework for that purpose"* (Mr. F, 00:12: 19-6) or
>
> *"Recognition is more of a formal act whereby a certificate or confirmation is really received that certain qualifications or a level has been achieved."* (Ms. M, 00:06: 33-9)
>
> *"At the heart of the matter, examinations are not even the issue. The real concern is access to an occupation. (…) And there the question is whether qualifications which were acquired somewhere else and are, indeed, completely different in nature (…) can then be recognised as equivalent to our own."* (Ms. Q, 00:06: 58-8)

Credit transfer, in contrast, is a procedure that shortens periods of learning and training or avoids duplication of learning. In the understanding of the majority of interviewees, credit transfer relates to the learning process (which is shortened), whilst recognition relates to certification (which need not be formally examined a second time).

> *"Credit transfer is something that is meant to avoid loops and duplication, but nevertheless facilitates entry into a learning process, so to speak, so that the length of time that has to be completed is no longer 100 per cent but a period reduced by the credited length of time. (...) Recognition is something that does not lead into a learning process but where learning acquired and fully mastered elsewhere is recognised and respected as such – to choose a different term – without imposing the requirement to prove it once again through a formal final examination, for example."* (Mr. D, 00:03: 49-7)

The legally binding status and the associated entitlements and status attributions thus differ accordingly.

> *"I can award credit in the form of a time reduction at any time without having to express any formal recognition of the content (…). I associate recognition with a certain degree of automatism. For example, as soon as something is recognised there is no longer any basis for its having to be examined again."* (Mr. R, 00:07: 26-6).

It is noticeable that some of the interview partners (mainly from the higher education sector) largely define recognition as societal esteem (Mr. V, 00:09: 54-1, Ms. U, 00:15: 21-4).

The majority ascribes the higher relevance to recognition when the focus is on improving transitions between educational areas. The interviewees justify this statement in terms of

- Educational economics *("If I have obtained a certain qualification in an earlier phase, which is similar to parts of a qualification in a subsequent phase, it is an endless waste of resources not to take advantage of this by reducing the training period.")* (Mr. R, 00:06: 54-4)
- subjective interests *("Credit transfer happens to be a procedure that enables the individual (…) to make parts of education or informally acquired learning more usable, both in education and training and in the labour market.")* (Ms. K, 00:06: 31-8)
- motivation *("because it can set incentives if people know that prior learning from one context can be used in another, without constantly needing to start again from scratch.")* (Ms. M, 00:04: 38-7) and
- labour market interests *("The demand is for skilled workers and fewer semi-skilled workers. These people simply have to be brought back in. The national economy will no longer be able to afford not to".)* (Mr. G 00:10: 34-5).

In the statements of many interviewees, credit transfer becomes the actual lever by which permeability in the education and training system can be improved. This is assumed to mean concessions with regard to the duration of training and financial costs, which benefit not just the individual but the system as a whole. Ms. K also refers to a reform-minded aspect that goes hand-in-hand with credit transfer.

> *"Credit transfer is now making us look a bit more closely and do something for the overall education and training system."* (Ms. K, 00:05: 24-1)

V Procedures

With the exception of the threshold to higher education, procedures for credit transfer exist at the interfaces of the system in Germany, which are regulated on the basis of the Vocational Training Act (BBiG) and the Crafts and Trades Regulation Code (HwO). In general terms, it can be attested that the applicable procedures are geared towards:

- "access" or "admission" (to a training programme, to an examination, etc.);
- reduction in the initial vocational training period and/or
- waivers (e.g. of admission tests or certain portions of initial vocational training).

In detail, this means:

a) Section 7 BBiG serves the purpose of awarding credit towards the initial vocational training period for prior vocational learning. This section was included In the reform of the Vocational Training Act of 2005, its aim being to replace the federal ordinances valid up to 01.08.2006 on the application of credit for the basic vocational training year. Section 7 BBiG provides

that the federal states, having consulted the Federal State Committee for Vocational Education and Training, determine according to legal ordinance whether attendance of a vocational-school course may be credited wholly or partially towards the initial vocational training period. Only a few federal states have availed themselves of this possibility so far (cf. GIB 2011, p. 15). Paragraph 2 of that provision specifies that the award of credit requires a joint application to the competent body from the trainee and the employer providing training. Initial studies (cf. GIB 2011) indicate that competent bodies are implementing the provision, each within its given discretionary scope and judgement.

b) The reduction of the initial vocational training period is the subject of Section 8 BBiG. The competent body is required to reduce the initial vocational training period if the goal of initial vocational training can be expected to be attained within the shortened period. Here again, the prerequisite is a joint application from both parties to the training contract. This is the case when *"an assessment by the competent body finds that the applicant has acquired full occupational proficiency in the chosen training occupation before the end of the vocational training period specified by the training regulation"* (IHK FRANKFURT AM MAIN, undated).

c) The mechanism known as the "external candidates' examination" *(Externenprüfung)* does not describe a separate examination procedure but refers to the admission of people other than apprentices to the chambers' final examinations for apprentices. The law opens up two possibilities whereby applicants may demonstrate their prior learning (BBiG Section 45, Paragraph 2):

    1. in a more input-oriented form: *"Persons shall also be admitted to the final examination if they produce evidence that they have been employed in the occupation for which they wish to take the examination for a period at least one and a half times as long as is prescribed for the period of initial training. Periods of initial training in another relevant training occupation shall also be deemed to be periods of employment."*

    a. 2. and in the framework of an opening clause: *"The production of evidence of the minimum period of employment pursuant to the first sentence may be waived wholly or in part if applicants convincingly demonstrate, by producing certificates or in some other manner, that they have acquired the occupational proficiency justifying admission to the examination."*

In the course of practical implementation, the competent bodies review whether the applicant meets the admission criteria based on the documents submitted, for example educational certificates or employers' references. Applicants may consult their chambers in advance regarding the selection and compilation of the appropriate and necessary documentation. Furthermore, courses are offered by competent bodies and other training providers in order to prepare for the theoretical parts of the final examination. Although attendance of these courses is voluntary, there is a discussion as to whether they are ultimately necessary in order to pass the examination successfully, since the content of learning taught at the part-time vocational school in the course of a dual system apprenticeship cannot be acquired through practical work experience alone[30]. In this respect, input-oriented criteria continue to be relevant in certain respects for admission to examinations as an external candidate (cf. also ANNEN/SCHREIBER 2009). In Germany, there are no quality standards regarding this

[30] In this regard, cf. SCHREIBER, Daniel / GUTSCHOW, Katrin (2013): An investigation of external examination candidates, BIBB Report 20/13, http://www.bibb.de/en/64117.htm (retrieved 25.05.2013) and SCHREIBER, Daniel et al. (2012): Anerkennung beruflicher Kompetenzen am Beispiel der Zulassung zur Abschlussprüfung im Rahmen der Externenregelung (Projekt 4.3.301), Abschlussbericht. Bundesinstitut für Berufsbildung, http://www2.bibb.de/tools/fodb/pdf/zw:43301.pdf

recognition process since industry has the constitutional right of self-organisation and the competent bodies are entitled to lay down their own standards.

For the most part the existing procedures are implemented on the basis of:

- assessments (higher education entrance qualification, intermediate secondary school leaving certificate) of successful educational progression;
- documents (employers' reports, school reports) and
- completed periods (work experience, previous initial vocational training periods).

Both the award of credit and the reduction/waiver of portions of training and admission require a joint application to the competent body from the trainee and the company providing training. The relevant competent bodies reach their decision at their own discretion and on a case-by-case basis.

The first step involved presenting to the interview partners the working definition used in the CS3L Project ("credit systems describe transfer and recognition procedures that are directed at facilitating access and transitions within the educational system and/or at shortening periods of education and training"). Three of the interviewees drew a clear distinction between recognition procedures and credit systems. The latter was characterised as the allocation of points for learning outcomes (Ms. K, 00:04: 48-5) and as having a basic structure that is modular (Mr. G, 00.21: 39-2).

All interviewees were of the opinion that procedures are in place in Germany that are directed towards facilitating access and transitions in the educational system. All apart from two respondents, who referred to ECTS credit systems at institutes of higher education or to procedures developed in ANKOM, all interview partners named one or more options for shortening training, credit transfer or admission from the BBiG and/or the HwO. Critical remarks were made that existing regulations were often "*too little known"* (Ms. M, 00:10: 23-1) and "*a little intransparent in terms of legal application"* (Mr. P, 00:08: 25-7) or met with *"too little acceptance"* from the host systems. Their efficiency was also questioned.

> *"There are certainly still opportunities for improvement. But at least there are some systems in place. How efficient these systems are or whether they are sufficient to meet all objectives, I am not in a position to say."* (Mr. F, 00:14: 34-7).

The successful transfer of learning achievements depends on decisions made on an individual case basis and on whether the host institution/company agrees. Whereas at this point some interview partners define the openness and indeterminacy of the BBiG/HwO as *"leeway that permits much"* (Ms. Q, 00:08: 25-7), others bemoan the absence of reliable nationally standardised quality standards and the resultant recognition rights and duties. It is clear that the discussion is being conducted without reference to ECVET.

The breadth of assessments as to the extent to which use is made of the existing opportunities range from "*recognitions have been taking place in their thousands for many many years"* (Mr. D, 00:20: 33-1) and "*that's old hat"* (Mr. G 00:21: 39-2) to the purely "*theoretical possibilities"* offered by the BBiG (Mr. O, 00:23: 54-7). The specific use of the procedures at selected interfaces in the system forms the main focus of the following remarks.

VI. Implementation – evaluation of the procedures at the interfaces in the system

In the German part of the study, the respondents were interviewed with regard to their knowledge and assessment of credit transfer procedures at the interfaces within vocational education and training that are presented below. In individual terms, these were as follows.

(1) **Access to training –** the interface between vocational training preparation and the dual system

(2) **Transition within training –** in the case of a switch between two dual training occupations and a switch from full-time school-based training to dual training

(3) **Admission** to the final examination

(4) **Transition to a continuing system –** advanced vocational training and higher education

The aim below is to present an assessment regarding the procedures at these four interfaces from the point of view of the interviewees. At the same time, the question as to which structural possibilities the respondents perceive at the respective transitions will be investigated. By way of introduction, the current situation at these interfaces will be indicated.

VI. 1 Access to training

In the past two decades, fewer and fewer school leavers have succeeded in progressing to dual training directly after completing general education. 10.9% of young people who signed their first apprenticeship contract in the dual system in 2010 had completed a programme of prevocational training or basic vocational training for at least six months beforehand (DATA REPORT TO ACCOMPANY THE 2012 REPORT ON VOCATIONAL EDUCATION AND TRAINING, 147). 2.4% took part in vocational preparation schemes, 1.7% had completed an in-company qualification measure and another 1.7% a basic vocational training year, while 1.6% had previously undertaken a prevocational training year. This meant that one in three of those who concluded a new training contract in the dual system in 2010 had previously passed through the so-called "transitional system", while one in five is reported to have undertaken vocational preparation (DATA REPORT TO ACCOMPANY THE 2012 REPORT ON VOCATIONAL EDUCATION AND TRAINING, 147).

Vocational preparation measures (Section 1 BBiG) have thus taken on considerable quantitative significance in recent years. They are offered by different providers and differ in terms of governance, target group, duration and function.

- Vocational preparation schemes *(berufsvorbereitende Maßnahmen, BvB)* are regulated on the basis of German Social Security Code III (SGB III), coordinated by the Federal Employment Agency *(Bundesagentur für Arbeit, BA)* and carried out by training bodies and in companies.

- Introductory training *(Einstiegsqualifizierung, EQ)* takes place in companies and is financed through the BA.

- Full-time vocational schools *(Berufsfachschulen)* implement measures such as the prevocational training year *(Berufvorbereitungsjahr, BVJ)* and one-year basic vocational training *(Berufsgrundbildungsjahr, BGJ)* on the basis of the Schools Laws of the Federal States (DATA REPORT TO ACCOMPANY THE 2012 REPORT ON VOCATIONAL EDUCATION AND TRAINING, 232).

All the measures mentioned lead to partial qualifications, and are not aimed at the completion of a qualification in a recognised occupation but at the teaching of basic vocational skills with a view to placement in initial vocational training.

In the year 2011, around 14.3% of young people (= 294,294 individuals) commenced one of the measures mentioned (DATA REPORT TO ACCOMPANY THE 2012 REPORT ON VOCATIONAL EDUCATION AND TRAIN-

ING, 372). BEICHT (2009) demonstrates, on the basis of the BIBB Transition Study 2006[31], that very few young people moved directly into in-company initial vocational training directly after completing a vocational preparation scheme, but succeeded only after one year in the majority of cases (i.e. 54% of full-time vocational school leavers and 68% of those who completed a prevocational training year). 20 to 30% of participants did not succeed in accessing initial vocational training leading to a full vocational qualification even three years after completing their vocational preparation scheme (BEICHT, ibid.). Since the proportion of young people in the so-called "transitional system" has risen in relation to the share of trainees undertaking initial vocational training in a recognised occupation in recent years, a trend which was reined back only slightly in 2011, the question of how access and transitions could better be organised is taking on increasing importance.

The relevance of credit transfer procedures at the interface between vocational training preparation and dual training is assessed very differently by the interviewees with regard to target group, organisation, potential for credit transfer and legal foundations. Opinions vary as follows.

> Credit transfer at this interface is useful
> *"Especially because the reality is that we see hundreds of thousands of young people in this position. Many of these young people (…) spend not just a year but several years in waiting loops and have competences that extend far beyond the level that should be achieved at the end of the first year of training or even further. This needs to be recognised in terms of educational economics as well as equally strongly in terms of the individuals themselves, who give up hope and are sidelined. They forget how to learn and become suspicious towards learning. This is something that needs to be recognised. What is happening is a social scandal."* (Mr. V, 00:23: 13-9)
>
> Credit transfer procedures at the interface between vocational training preparation and dual training are not useful
> *"If I had a wish, my wish would be that this would work perfectly. If, however, I have to accept that it does not, or if I have to observe that it is not accepted, then I ultimately do not believe that it is useful to continue to dig at the established structures in the transitional system as has happened up to now. Perhaps it is also better to be more honest. It may be politically incorrect, but we need to be open and say: "Credit transfer here does not make any sense. We need to be happy to get the clientele of which we are speaking here into the regulated system." I also do not care whether we invest one year more or not. The crucial thing is progression to the regulated system of vocational education and training. This is what is most important."* (Mr. T, 00:20: 33-9)

In the interviews, it becomes clear that it is not only the objective of vocational training preparation (i.e. the imparting of basic principles to form the foundation of training) that is getting in the way of any intentions regarding credit transfer. ("*There are theoretical areas of potential for credit transfer. If we now transfer these to the system, we will need to solve a definition dogma. How can vocational preparation training be vocational education and training?"* (Mr. O, 00:23: 54-7) The emphasis is far more on implying that young people in vocational training preparation have considerable learning deficits.

> *"I always think that those in vocational training preparation, who are already a very difficult clientele, need time. Otherwise they would certainly have progressed directly to dual training and I believe, although there may, of course be exceptions, that credit transfer in this area is not very useful in principle."* (Ms. A, 00:14: 38-1). "*The main focus here is on socialisation rather than on recognition."* (Mr. C, 00:39: 03-4).

[31] The study in question was a representative survey, conducted in summer 2006, of young people aged from 18 to 24 years, who gave information retrospectively on their full educational and work biographies (cf. BEICHT 2009).

Whereas some respondents stress that competences that are equivalent to vocational education and training are acquired in vocational training preparation (Mr. L, 00:34: 03-6), this is doubted by others (Ms. A, 00:14: 38-1; Mr. C, 00:30: 03-4). There is unanimity in all interviews that existing credit transfer potential is not necessarily applied.

> *"I understand vocational training preparation to be things like introductory training. There is (…) also an opportunity here to credit certain contents. In the best case, this would lead to a shortening of training. However, this frequently does not take place, because the company, of course, initially tends to use a „practical placement", i.e. the introductory training, to get to know young people with the idea in principle of enabling them to progress to full training. The reason for this is that introductory training is often for young people who are more disadvantaged (…). This means that the priority would be to be able to say with certainty that a young person will ultimately be able to complete training successfully, not a shortening of training. This is another quality criterion for the company. Is the young person in a position to absorb in a reasonable manner certain elements that are dealt with in training, and does he or she show any motivation to enter training?"* (Mr. F, 00:19: 42-2)

Some interview partners clearly call the companies' interest in credit transfer into question (Ms. A, 00:17: 07-04, Mr. B, 00:30: 42-1) and thematise trainees primarily as an economic factor in the company (Mr. C, 00:30: 03.4). This point is of particular importance in light of the fact that the decision whether learning performances are credited is always at the discretion of the employer. This attitude is in contradiction with opinions that seek the to regulate credit transfer statutorily and link it to the necessity of implementing vocational training preparation in a way that is aligned towards a standard and quality assured. The interviews reveal a dispute as to whether statutory regulation actually facilitates or tends to hinder credit transfer. Several parties emphasise that young people could instead have the opportunity upon application to end training with an earlier final examination. This possibility, which is being discussed outside credit transfer, would offer greater security to both young people and the companies and would ultimately lead to the same goal as credit transfer, the shortening of training in overall terms.

Although the reform of the Vocational Training Act in 2005 created the opportunity to provide credit transfer for pre-vocational qualifications via § 7, only infrequent use of this is made – a point on which all interviewees agree. One interview partner has extremely decided views on the reform of this law, speaking of a *"politically correct pathway that fails to take reality into account"* (Mr. T, 00:22: 22-7), because neither the probability of the success of this approach nor the case numbers (related to the young people seeking credit transfer) were not considered in advance.

In summary, a wide variation between assessments of whether credit transfer is useful at this interface or not can be identified. This is due to the approach of vocational training preparation, the supposed target group and doubts as to whether the learning outcomes imparted in vocational training preparation are capable of being credited to training. Opinions are also divided with regard to the issue of whether credit transfer should be compulsorily regulated by statute or should be in the field of discretion of the companies.

There is agreement that credit transfer rarely takes place at this interface, although this would be possible on the basis of the law. The interviewees who speak out strongly in favour of credit transfer call for quality-assured procedures that are aligned to learning outcomes and derived from training standards.

VI. 2 Transitions within training

Section 22 of the Vocational Training Act (BBiG) provides that a concluded training contract may be terminated by either party during the first four months (probationary period). After the expiry of the probationary period, the trainee may terminate the relationship at any time without notice. The employer may only do this for "serious reasons" (such as closure of the company). In 2010, 23% of training relationships were dissolved early. The reasons for this are complex and vary considerably from one federal state to another and from one training occupation to another.[32] Early dissolution of a training contract does not automatically mean, however, that a young person has dropped out of the dual system of vocational training entirely. An estimated 34% of young people begin a new dual system apprenticeship within two years. 10% commence a full-time school-based vocational programme or initial vocational training in a civil service career, and 3% begin a degree programme at a university or University of Applied Sciences (BEICHT / WALDEN 2013, p. 10).

Training periods can be reduced and skilled workers made available to the labour market at an earlier stage if credit for prior learning (e.g. competences attained during an initial vocational training programme that was not ultimately completed) can be applied to a subsequent training contract. The figures for 2011 show that 10% of new training contracts were concluded with a training period reduced by 11 months or more. In 6% of cases this involved young people who had previously started but not completed an initial vocational training programme (DATA REPORT TO ACCOMPANY THE 2012 REPORT ON VOCATIONAL EDUCATION AND TRAINING, p. 119).

Debate surrounding the transitions within dual vocational education and training is far less controversial than at other interfaces. It also, however, becomes clear that there is little knowledge of demand thus far, permitting the conclusion that such procedures are used in individual cases rather than systematically. This is also revealed by the statements of the interview partners, who largely favour such an approach, particularly with regard to credit transfer in basic training or in the first year of training. Respondents agree on the point that credit transfer of learning outcomes is only useful if this takes place within an occupational field and not in strongly specialised occupations or outside basic training.

Particular target groups stated are trainees from companies which have gone bankrupt and so-called dropouts. The prospect of the training of occupational groups is also indicated as a possibility for better transition in the case of credit transfer. Mr. L stresses:

> *"I definitely find it useful, because if we take (…) the observation of occupational groups seriously there is a lot of overlap in the occupations. (…) Because of the demographic situation, schooling is also ultimately an issue, because we cannot maintain a system where we have training in every village, so to speak." (Mr. L, 01:04: 33-3)*

Like other interview partners, he finds in this a clear justification for credit transfer procedures at this interface. At the same time, a future vision is formulated that is aligned towards the definition of core competences within an occupational field.

The switch from full-time school-based training to dual training comprises a further transitional passage. In this case, Section 7 of the BBiG authorises federal state governments to issue ordinances permitting the full or partial crediting to the period of training of courses at vocational schools or vocational education and training at another institution. Full or partial credit transfer of courses at vocational schools to dual training could thus reduce the period of training. No reliable statistical data exists on the mobility behaviour of trainees between the school-based occupation system and

[32] 40-48% of initial vocational training contracts in the hotel and catering trade and in primary service industry are terminated early. Low rates of early contract dissolutions are found in public services occupations and in some production occupations. DATA REPORT TO ACCOMPANY THE 2012 REPORT ON VOCATIONAL EDUCATION AND TRAINING, 170 ff.

the dual system. The 2012 Vocational Education and Training Statistics, however, identified that only 0.6% of trainees with a newly concluded training contract had previously completed school-based training. The fact is that statutory provision pursuant to § 7 is seldom applied (cf. ECKERT 2013). The regulations made often remain individual cases. The supposition is that, in light of the positive training place situation in the dual system, the significance of full-time school-based training will continue to decline. This is also reflected in the statements made by the interview partners.

Opinions on whether the learning outcomes from both forms of training are comparable are, however, divided. One view doubts that the higher theoretical proportion of full-time school-based training compensates for the absence of the period of company-based training.

The argument brought forward by another interview partner is the ever more complex requirements, especially related to the necessary theoretical and professional background knowledge needed in certain qualifications, and which are not possible to impart in regular training, especially in SME's. A expansion of full-time school-based training courses in these areas will remain useful in the future in some cases (Mr. R, 00:31: 46-2).

A fundamentally critical view is adopted of the double training time that occurs when school-based training is followed by dual training. Admission to the chamber examination pursuant to §43 (2) is seen as an option here.

The majority of the interviewees emphasise that the establishment of the school-based occupation system especially emerged at a time when the training market was facing a problematic situation, when training places in the dual system were scarce. For this reason, full-time school-based training is described as an "*auxiliary emergency channel to get young people into training"* (Mr. R, 00:30: 55-2). Most respondents believe that demographic developments will lead to a reduction in the transitional problem.

VI.3 Admission to the final examination – formalisation of informal or full-time school-based learning through the acquisition of a recognised dual system vocational qualification

In Germany the objective of bringing credit for informally acquired learning into the initial vocational training sector is normally geared towards obtaining a complete qualification, i.e. in a state-recognised training occupation. In this case, credit transfer relates both to prior certified learning and to prior experiential learning. The key statutory framework conditions with regard to credit transfer for non-formal and informal learning are set out in Section 45, Paragraph 2 BBiG and in Section 37, Paragraph 2 HwO, which regulate the admission of "external candidates" to the final examination. The definition of an external examination candidate is a person who is *"not admitted to the final examination via the pathway of a regulated initial vocational training programme in the company and the part-time vocational school"* and who has acquired his or her vocational competences in practice (SCHREIBER / GUTSCHOW 2013). In the year 2010, 25,962 people – accounting for 4.5% of all examinees – were admitted to the final examination by demonstrating occupational experience (cf. SCHREIBER / GUTSCHOW 2013).

Also listed in the official statistics as external examination candidates are those people wishing to obtain a dual system vocational qualification after completing a full-time, school-based scheme or initial vocational training programme. Section 43 Paragraph 2 BBiG provides for admitting these persons to the final examination if the (full-time, school-based) training course completed corresponds in content, organisation and volume of initial vocational training to dual system initial vocational training in a recognised training occupation and contains an appropriate proportion of vocational practice. In 2010 this rule was applied in the case of 9,987 persons who had completed full-time,

school-based training programmes, coming predominantly from the field of home economics (SCHREIBER / GUTSCHOW 2013).

Alongside the external examination, which ultimately aims to achieve formal recognition of learning outcomes, further endeavours also take place in Germany with regard to the recognition of learning outcomes acquired by non-formal and informal means. The "Strategy for Lifelong Learning in the Federal Republic of Germany", formulated jointly in 2004 by the Federal Government and the federal states, sets out an education policy approach which promotes lifelong learning by according central importance to the validation of non-formally and informally acquired skills and competences (cf. BLK, 2004). The significance of the theme is also reflected in various nationwide educational policy programmes and initiatives, in academic research studies and in the appointment of expert groups. In recent years a host of approaches and methods have been developed in this context. Two such approaches will be cited here by way of example – the ProfilPASS system for the identification and assessment of individual learning experiences and the German Research Foundation (DFG) priority programme "Competence Models for Assessing Individual Learning Outcomes and Evaluating Educational Processes" (cf. http://www.profilpass.de/ and http://kompetenzmodelle.dipf.de/en).

Within the scope of the interviews, it is stated that advice is usually provided prior to admission to the external examination. Within this advisory provision, interested parties are given information on the procedures of the chamber and on the final examination itself. Some interview partners point out that admission on the basis of evidence of one-and-a-half times the training period is relatively unproblematic whereas "providing credible evidence by other means" is currently often associated with major problems for all those involved. The problem is addressed that one criterion for admission, namely that the candidate is required to provide evidence of occupational proficiency, is difficult to evaluate on the basis of documents. The assessment by the chambers is usually undertaken by the chamber staff responsible for the respective occupation via a comparison with the skills required in the training regulations. This check takes place in a highly formalised manner (cf. Mr. B, 00:42: 24-1; Ms. Q, 00:20: 27-0; Ms. W, 00:21: 34-2).

> The majority of the interview partners do not view the external examination as a credit transfer mechanism due to the fact that § 45 BBiG, in which it has its basis, is solely concerned with admission to the final examination. The respondents fundamentally evaluate the possibility of credit transfer of informal learning (e.g. to initial or advanced training) as both very useful and necessary. The specific proposal is made that the current procedure for the external examination should be supplemented by an elaborated validation process involving appropriate broader methods. The interviewees state that the problem is how non-formal and informal learning can be formalised. They believe that relevant assessment procedures are needed in order to make informal learning comparable with other forms of learning. They also indicate that, although credit transfer is a highly individualised process, it needs to be oriented towards a fundamental procedural system rather than being exclusively aimed at the individual. Some interview partners believe that there is an absence of a uniform system with relevant procedures which provides a binding foundation for the process of the external examination at the individual chambers. (Mr. F, 01:01: 27-5, Ms. Q, 00:34: 19-3 and Ms. W 00:21: 34-2). Although attention is drawn to the fact that endeavours are in place to draw up recommendations for admission to the external examination, implementation fundamentally takes place at chamber level via the relevant responsible staff (Ms. A, 00:22: 57-5).
>
> *"Normally, you would take the training regulations and find a way of providing evidence for all contents. With regard to employer references, we take care not to produce testimonials that simply state "has worked for the company for ten years. The individual main focuses of activity are properly stated and listed in detail. It is certainly difficult to provide evidence of this occupational proficiency with these employer references or with contracts of employment that state activities. Can this be checked*?" (Ms. A, 00:22: 34-2)

Orientation towards input criteria (in the case of both the external examination and retraining), a frequent object of strong focus in Germany, is stated as being a fundamental problem for the credit transfer of non-formal and informal learning. This is an area where it is felt that there needs to be a stronger orientation to qualitative criteria in future. Suitable procedures based on competence assessments should also be developed (Mr. B, 00:33: 37-1). There are complaints that, in considering admission to the external examination, the competent bodies still focus very strongly on evidence of one-and-a-half times the training period and are thus ultimately geared towards an input criterion.

> *"This is once again merely a pro forma record (…) As a participant, I need to prove by means of a simple employment reference that I have been active in the occupation. This shows that I have carried out activities that form part of the occupation. It means that I never have to prove that I have performed 50 percent or two thirds or whatever proportion of activities in the occupation."* (Mr. B, 00:38: 09-3)

The high level of requirements in the theoretical parts of the final examination is named as a further problem within the context of the implementation of the external examination. Provision for targeted preparation for the examination is evaluated as unsatisfactory.

VI.4 Transition to a continuing system – advanced vocational training and higher education[33]

Following acquisition of an initial vocational qualification, regardless of whether this is achieved upon completion of vocational education and training or via the procedures for admission to the chamber examination, advanced vocational education and training offers employees the opportunity to obtain a higher level of qualification and to progress within the company. A survey carried out by the Association of German Chambers of Industry and Commerce (DIHK) in 2011 of approximately 11,000 persons who had successfully completed the Chamber of Industry and Commerce continuing training examinations showed that, between 2005 and 2010, 84% of those who had obtained such advanced training had indicated company-based training to be their last vocational qualification. Nevertheless, 3.9% had progressed from full-time school-based training to advanced training and 5.3% and 4.6% respectively had previously completed a dual course of higher education study or a degree (ibid., 10). The desire for advancement within the company and financial improvement may be regarded as particular motivations to take part in advanced vocational training. These goals apply to 75.3% and 51.5% respectively of those completing company-based training. By way of contrast, 49.0% of higher education graduates stated that they were seeking financial improvement and 42.2% said that participation in advanced training was necessary in order to expand and deepen their own professional knowledge (cf. DIHK 2011, 16). The small proportion of those who had completed a higher education degree as their last qualification should, however, also be taken into account. The opportunity to assume responsibility for more demanding tasks and the higher remuneration possibly associated with this are frequently a positive consequence of the completion of advanced training (cf. GÖTZHABER et al. 2011).

As the remarks above are intended to illustrate, the value of acquiring a master craftsman qualification is viewed by the interviewees as an opportunity for higher vocational training or education. This is linked with a desire for better access and at the same time, just as at the other interfaces, a demand for the guarantee of appropriate qualitative education and training, such as the master craftsman training courses to prepare for the examination are perceived to be. It is equally revealed that no credit transfer procedures have been effectively implemented at this interface. Although there is a fundamental awareness that exemption can be given for individual parts of the master craftsman or technician examination, there is no knowledge of specific processes carried out in accordance with a standard.

[33] The results of this part of the survey were collated by Franziska Kupfer (Section 3.2).

Whereas more rapid access to this continuing training is advocated (including against the background of offering an alternative to academic education), reference is also made to the importance of acquiring practical knowledge or occupational experience, something which is evaluated as being very important. (Mr. C 00:56: 10-8) *"This is something I don't think much of, because I have always thought that master craftsmen need a bit of practical experience after training." (Mr. B, 00:56: 44-7)*

Alongside the structuring of access and transitions within the vocational education and training system, particular importance is attached to the promotion of permeability between the vocational and higher education areas. Whereas the initial main focus in recent decades has been to facilitate access in an appropriate way to higher education study for those with vocational qualifications and not in possession of a higher education entrance qualification, such endeavours have now for some time been driven by an increasingly holistic view and by the consideration of further aspects that may contribute to increasing permeability. Although there is no question that both the vocational and higher education system enjoy considerable acceptance and esteem, it remains the case that only a small number of persons with a vocational qualification and without the upper secondary school leaving certificate/general higher education entrance qualification progress to institutes of higher education. The proportion of those with a vocational qualification and not in possession of a higher education entrance qualification commencing a course of higher education study in 2010 was around 2%[34]. Although the Resolution adopted by the Conference of the Ministers of Education and Cultural Affairs in the Federal Republic of Germany (KMK) in March 2009 with regard to "Access to higher education for applicants with vocational qualifications who are not in possession of a school higher education entrance qualification" (KMK 2009) and the subsequent implementation of this by the federal states removed a crucial barrier to entry to higher education study for this target group, it is clear that facilitation of formal access to the institutes of higher education can only be the first step towards fostering permeability between the areas of vocational and higher education.

A further important reason for the low level of participation in higher education by this target group is the almost complete lack of information and advice for those with vocational qualifications. Persons in possession of vocational qualifications who wish to progress to higher education study frequently approach the competent bodies responsible for their vocational education and training, where there is mostly an absence of knowledge of higher education access regulations and suitable study provision. The institutes of higher education also too infrequently perceive such persons as an interesting target group worthy of being canvassed.

In addition, particular attention should be paid to the crediting of competences acquired vocationally to courses of higher education study. Those with vocational qualifications mostly already possess varied skills which they have acquired via initial vocational education and training, via occupational practice and via any continuing and advanced training courses they may have completed. It is likely that areas of potential credit transfer exist, particularly with regard to the commencement of a course of higher education study that is related to previous occupational activity.

As long ago as June 2002, the Conference of the Ministers of Education and Cultural Affairs adopted a resolution for the "Credit transfer of knowledge and skills acquired outside the higher education system to a higher education course of study" (updated on 18.09.2008; KMK 2008). Although this provides for up to 50% of a course of higher education study to be replaced by knowledge and skills obtained outside the higher education system, the credit transfer of competences acquired via vocational means has up until now only played a subordinate role at most institutes of higher education. The Federal Ministry of Education and Research (BMBF) initiative "Credit transfer of occupational competences to higher education courses of study" (ANKOM) has established the feasibility of crediting competences acquired via vocational pathways to course of higher education study for different

[34] Source: Federal Statistical Office – Higher education study entrants by type of higher education entrance qualification 2000-2010. Calculations of the Federal Institute for Vocational Education and Training.

combinations of academic and vocational subject areas and developed general, individual and combined credit transfer procedures.

In the general credit transfer procedures, the respective vocational training qualifications are evaluated with reference to the target course of study and formally credited. In contrast to this, the individual credit transfer procedures identify individual competences in reference to the course of study with the assistance of portfolios or examinations and credit these in a personally related manner. The combined credit transfer procedures involve linking both approaches and providing both general and individual credit transfer. The focus now is on the national implementation of these credit transfer procedures at institutes of higher education and on creating conditions that are conducive to credit transfer, such as the establishment of robust learning outcomes orientation in the regulatory instruments and in examination practice in vocational and higher education.

Last but not least, however, those with vocational qualifications also require attractive study provision which accords due consideration to the particular characteristics of this target group. Persons in possession of vocational qualifications who decide to commence a course of higher education study following vocational education and training and a phase of occupational activity are not only mostly significantly older than other undergraduates but frequently also have wider family and financial commitments. In-service or part-time courses of study enable a balance to be achieved between work, study and family. A further objective needs to be to align the methodology and didactic approach of study provision to this target group and to make reference to prior occupational experience.

In addition to this, those who hold particularly comprehensive vocational qualifications who may, for example, already have completed upgrading training, should be given direct access to Masters courses of study without having completed a first degree. The “Joint federal state structural regulations for the accreditation of Bachelor and Masters courses of study”, adopted by the Conference of the Ministers of Education and Cultural Affairs and revised at the beginning of 2010, (KMK 2010) open up this opportunity. Some federal states are already making use of this option.

The interface between vocational and higher education is evaluated as particularly important by a majority of interviewees. The reasons stated are the upgrading of vocational education and training that is taking place due to improved permeability to higher education and the opening up of individual career pathways. At the same time, however, the respondents perceive that the numbers of those with vocational qualifications who find their way into higher education are still low. The “Resolution for the credit transfer of knowledge and skills acquired outside the higher education system to a higher education course of study” (KMK 2002; updated in 2008) and the “Resolution for Access to higher education for applicants with vocational qualifications who are not in possession of a school higher education entrance qualification” (KMK 2009) are stated as being trailblazing resolutions adopted by the Conference of the Ministers of Education and Cultural Affairs. Several interview partners remark, however, that the implementation of these resolutions is still in its infancy and that they have thus far primarily been driven forwards by a number of “beacon initiatives and institutes of higher education”. Some respondents have already been able to gain experience with higher education students with vocational qualifications and are extremely positive in their remarks regarding this target group. In the view of Ms. M (00:43: 14-1), for example, those with occupational practice study “*in a more targeted and successful manner and more rapidly*.” From her field of study, Ms. U knows women who originally completed childcare training having achieved the lower secondary school leaving certificate and began higher education study at the age of 40 via the master craftsman regulation. She finds this to be “*fantastic, because these people have had time to develop. They are often highly motivated and very clever individual who, by reason of their origins, biography or all kinds of strokes of fate never had the opportunity before.”* (00:43:00-4) She finds *“tapping into this potential and resource”* a highly attractive prospect and also feels that such heterogeneity would also be of benefit to study groups.

Nevertheless, a small number of interview partners adopted a critical view towards the opening up of institutes of higher education, the fear being that the most able skilled workers from the field of VET would be lost to higher education.

Many respondents also remarked upon the German tradition of a clear separation between vocational and higher education. Particularly the credit transfer of competences acquired via vocational means was described as very time consuming and difficult. *"Academics simply find it extraordinarily difficult to recognise vocational competences in any way or accord them equal status."* (Mr. F, 00:54: 36-3). Notwithstanding this, there are a number of promising approaches that improve the credit transfer of learning outcomes from vocational education and training. Consecutive and integrating models are under discussion. In the case of an integrating approach, advanced training providers will need to be involved and agreements reached on matters such as subsequent higher education study (Mr. P, 00:37: 06-8). Many interview partners perceive that the main obstacle to building up the proportion of persons with vocational education qualifications entering higher education study is the tendency towards compartmentalisation displayed by institutes of higher education and by the universities in particular. The proposal made here is that institutes of higher education should continue to decide on admission of students but should be required to appeal to a "*broader clientele"* (Ms. M, 00:49: 54-8). There also should not be any entry tests which can only be passed by those who have completed the upper secondary school leaving certificate. There is also a general call for greater cooperation between the various educational establishments and for the expansion of transitional support provision such as bridging courses. The interviewees also feel that there is a lack of in-service higher education provision. More distance learning courses, the expansion of weekend courses, part-time courses and e-learning provision would all be desirable in this regard. In overall terms, however, there is a feeling that the economic necessity of increasingly opening up institutes of higher education to the target group of those with vocational qualifications will be revealed more and more. The universities will also increasingly try to attract those with vocational qualifications or students interested in in-service continuing training and will need to open up to these new target groups in order to survive. The motivation of those wishing to pursue higher education is not seen as a problem. The instrument of upgrading training scholarships is, for example, "booming" (Mr. R, 00:42: 03-7).

Ms. E (01:16: 23-5) summarises her experiences of the many hurdles at the interface to higher education thus far against the background of the motto "no qualification without connectivity". She states, however, that these have now been somewhat reduced in purely formal terms with regard to admission as a result of the KMK Resolution. As far as credit transfer is concerned, she feels that this remains a major field of debate which has lost none of its attractiveness for vocational education and training in particular. This interface is of essential significance to the future sustainability of the VET system, especially against the background of falling numbers of school leavers. She believes that it would be absolutely in the interest of vocational education and training if the equivalence of learning achievements could be expressed via credit transfer and learning waiting loops could be avoided.

VII Germany and Europe

Most of the interview partners believe that the instruments and initiatives developed by the European side (the EQF, ECVET and EQAVET are mentioned) are impetuses for national development. Orientation towards learning outcomes or outcome orientation is evaluated in a particularly positive light. European initiatives and objectives are perceived as a kind of "gentle pressure" from Brussels which is exerting an astonishing effect at national level. The initiative of the Commission to make quality assurance instruments transparent is considered to be important.

The added value provided by European developments is fundamentally seen as promoting the transparency of national education and training courses, qualifications and quality assurance instruments (Mr. G, 00:12: 17-5; Mr. F, 01:10: 37-3). In the case of European educational policy instruments, the

objective of focus is transnational mobility, both in the educational system and on the labour market. The central correlation between national and European initiatives is viewed as the consideration of the outcome. This is an area where the respondents feel that a realignment of the national way of thinking, also towards a stronger focus on learning outcomes, is required. There is also a belief that it is important for national activities to correspond to European activities and for both to have a joint framework (Mr. F, 01:13: 21-2). Nevertheless, the interviews also indicate that it is difficult to combine ECVET and DECVET, for example, because both initiatives are pursuing different objectives. Whereas ECVET focuses more on transnational mobility, there is a greater emphasis in DECVET on the topic of permeability. In overall terms, the view is that there is a need for precisely tailored credit transfer and recognition systems – "*firstly in the areas where there is a particular requirement and the later, of course, where certain requirements need to be teased out. Otherwise I don't believe that it is feasible"* (Mr. G, 00:20: 16-2). In this context, attention is drawn to the provisions of the Vocational Training Act, which represents the framework for the implementation of relevant procedures.

The European initiatives aimed at the introduction of ECTS and ECVET have structural principles (i.e. the awarding of credits and the accumulation of certified learning outcomes) at the forefront of their considerations. These are, however, not used in the German vocational education and training system. Within the German context, this leads to a series of conceptual, legal and organisational disparities.

(1) On the **legal level**, ECVET's intended aims of accumulation, recognition and transfer of credit are found to be clearly at odds with the basic legislative provisions in Germany, i.e. the Vocational Training Act (BBiG) and the Crafts and Trades Regulation Code (HwO).

(2) The so-called **"national practices"** referred to in the Recommendation on the Establishment of a Credit System in Vocational Education and Training (ECVET) are based upon the fundamental principles of dual system VET (concept of the recognised occupation and acquisition of occupational competence). As regards the applied procedures, they rely upon assessments (upper secondary school-leaving and higher education entrance qualification, intermediate secondary school-leaving certificate), documents (employers' references, school reports) and/or completed periods of time (work experience, previous periods of initial vocational training). Essential differences can be discerned here from the ECVET-inspired concepts of outcome-driven, individually assessed and certified units of learning outcomes, irrespective of where learning took place.

(3) Not only are the legal and methodological/procedural foundations at variance, but the **conceptual ideas** of how credit and recognition are defined and what purposes they are supposed to serve differ accordingly from each other.

(4) On the level of **political and administrative steering** – with the exception of the higher education sector – ECVET is not (yet) ascribed any foreseeable positive impacts with regard to improving credit transfer at the interfaces. Existing reservations among the representatives of the vocational system have only been reinforced by their first-hand experience of ECTS.

The "recognition of learning outcomes"[35] driven via ECVET presents German stakeholders with problems due to the fact that "recognition" relates solely to the training occupations as such (§ 4, BBIG) and not to individual learning outcomes. Training occupations are deemed to be recognised if they have been enacted via a legal ordinance from the Federal Ministry of Economics and Technology or another responsible ministry and with the agreement of the Federal Ministry of Education and Research. If an occupation is state recognised, training may only take place in accordance with the training regulations. "Recognition" therefore relates to the occupation itself, not to (individual) learn-

[35] Learning outcomes are recognised via the process of attesting officially achieved learning outcomes through the awarding of units or qualification (cf. EUROPEAN COMMISSION 2009, C 155/14).

ing outcomes. Underneath this level, recognition can only take place within the meaning of an "appreciative attitude". This does not, however, form the basis of any legal or actual objectives and therefore cannot fulfil the European objectives. "Recognition" also describes a legal act, the consequence of which is the awarding of a title/vocational qualification (synonyms here would be "correspondence", "equal treatment" and "allocation"). Recognition refers to qualifications, not to learning process (see, for example, the "Recognition Act", which was introduced in Germany in 2012). One interview partner puts this in a nutshell in the following words.

> *"There are risks associated with ECVET in particular. (…) For us nationally, a debate is taking place on defining and allocating points to individual units of learning outcomes within initial vocational training programmes. And the next step would be to certify them individually. And at that point we have dismembered the principle of the recognised occupation that is integral to initial vocational training as we know it."* (Mr. N, 00:40: 59-4)

Interview participants sum up their reservations about the principles associated with ECVET in phrasing such as *"the Damocles sword of modularisation"* (Mr. I, 00: 13:33) and the fear of *"systems being brought into line somehow by the lawnmower method"* (Mr. D, 01:44: 07). The impression is given that it *"cuts to the quick, strikes directly at the procedures and systems themselves (and that) the harmonisation of the education and training area is being overwritten by the concept of lifelong learning"* (Ms. E, 01:48: 06-7).

The challenges at the interfaces of the VET system vary in magnitude because different objectives and requirements prevail.

The majority of respondents either do not mention in their interviews whether a credit system along the lines of ECVET is fit for this purpose[36] or call this into doubt. *"But credit transfer by means of credit points is problematic in my view."* (Ms. W, 00:05: 19-2) This is justified, on the one hand, by the experience built up with ECTS, which is *"not really the instrument for establishing permeability or time reduction or recognition"* but understood by the respondent as a *"purely technical instrument for measuring workload"* (Mr V, 00:15: 47-4) and therefore limited in its meaningfulness. Furthermore, a few interviewees emphasise that credits do not necessarily influence whether the initial vocational trading period is shortened or credit awarded towards other courses.

> *"Take somebody who is a lab technician, for example, which is undoubtedly a recognised training occupation. But as a university I am not obliged or I can refuse to award credit for that prior learning, because I say – and that often used to be the case – 'anything not learned at my university doesn't count'."* (Mr. S, 00:35: 57-5) or: *"If a student comes from abroad and has accumulated some credit, then of course I have no great problem in saying: "That's great, well done." (…) But to what extent I can credit these 10, 15, 20 credits towards the degree programme, or whatever course the student wants to take with me, is a totally different question in reality."* (Mr. P, 00:08: 01-7)

VIII Concluding remarks

The interviews suggest that the interview partners do not perceive that either recognition or accumulation plays an essential role in overcoming the interface problem in Germany. The stakeholders in the German educational system who were interviewed are of the majority view that credit transfer is accorded a higher degree of relevance when the focus is on improving transitions between educational areas. The legal provisions set out in the Vocational Training Act and the Crafts and Trades

[36] In total, only eleven of the 27 respondents mentioned the use of credit transfer systems at the interfaces of the German system.

Regulation Code provide a basis for permeability in the system but only solve the existing problems to a certain extent.

In principle, all competences acquired by formal, non-formal and informal means which have been identified, analysed, recorded and measured and aligned to a standard can be credited. This is also the basis for assessment of equivalence in respect of competences that have been acquired in different educational sub-systems or outside such sub-systems. The foundations for this will be provided by standards which, according to one interview partner, still need to be drawn up.

> *"Our training regulations are only partially suitable as standards. It is frequently stated that these are our quality yardstick and standard. Our training courses remain non-competence based down to the present day, something which is completely incomprehensible to me. (…) In continuing training, of course, things are much worse because only a small part of continuing vocational training takes place on the basis of advanced training regulations. The majority is outside the standards, and this is an area where we need to start by developing standards."* (Mr. V, 00:13: 02-9)

So far there has been a lack of instruments and criteria whereby broader and more effective use could be made of the existing statutory possibilities (*"It's really a quandary, to say in all seriousness that credit transfer and recognition will happen when equivalence is found. And what is equivalence? That's quite a philosophical question."* (Ms. Q, 00:49: 47-2)) The question of greater permeability therefore does not only depend on procedures, but on the existence of trust between the educational areas, i.e. between stakeholders in the sending and receiving system, and in the certified prior learning for which credit is to be awarded. *"The stakeholders keep starting over with potential analysis, competence assessment, competence procedures, over and over again, because none of them actually have enough trust to believe in what the person before me did."* (Mr. O, 00:18: 15-8)). All the same, credit transfer remains a voluntary act: *"… because the extent to which what I have acquired now will be accepted, in turn, by the next institution I want to attend is another question. (…) Every institution has the individual right to accept or reject applicants."* (Mr. P, 00:06: 33-6).

Interviewees do not see the improvement of access and transitions in the German education and training system as dependent on introducing a credit system, but on tweaking the procedures already introduced and being practised. The corresponding procedures should:

- be transparent in legal application, with low entry thresholds and freedom from barriers;
- be outcome-oriented – learning outcomes should be central with *"more freedom within the system"* and an assessment of competences *"based on sound common sense"*;
- not be too bureaucratic, and not justify *"any new legal apparatus"*;
- include informal and non-formal learning;
- lead *"necessarily to recognition"* once evidence has been presented, and
- be *"rooted in practice"* (evidence of competence) and prevent any divergence between academic aspirations and practical implementation.

In order to meet these (sometimes contradictory) requirements, in the view of interviewees the following steps are necessary.

(1) An analysis of credit transfer opportunities should be carried out and corresponding information should be drafted and disseminated to the potential candidates for credit transfer procedures.

(2) For the subsystems of education and training, competence-based standards need to be developed which lay the foundation for the assessment of equivalences.

(3) A basis of trust is necessary between the stakeholders from the individual (sub)systems of education and training (vocational preparation, dual and full-time school-based system, advanced vocational training and higher education) so that the transfer of credit for learning outcomes can be practised. This may be accomplished through network activities and quality assurance measures by and for education and training providers.

(4) Competence analysis and assessment procedures must be identified and/or developed which are unbureaucratic, heuristic, practicable and valid even for the assessment of non-formal education and training. Tried and tested competence assessment procedures which work should be cast in legally binding form and incorporated into the Vocational Training Act (BBiG) and the Crafts and Trades Regulation Code (HwO).

(5) Standards must be developed whereby competences acquired via the vocational route (outside the dual system) can be documented. Furthermore, procedures are needed for standardising examination practice, for training examination staff and for documenting results.

(6) The term "learning outcomes" should be propagated across all levels of education and training, and be included in the next reformed version of the legislation.

To that extent, the concern is not to "implement" ECVET within the German context but to enhance and promote existing classification schemes and procedures and to execute these as vehicles for ensuring quality and trust in the educational areas. The initiatives from national and European funding (including DECVET, Connect and "ECVET 2nd generation") provide starting points whereby competence- and learning-outcome orientation, curricular interlinking across education and training areas, assessments of learning outcomes and quality and trust-building measures can be gainfully implemented in German VET in harmony with European instruments (cf. HEMKES, KÖHLMANN-ECKEL, MEERTEN 2012).

IX Literature

AUTORENGRUPPE BILDUNGSBERICHTERSTATTUNG *[VOCATIONAL EDUCATION AND TRAINING REPORTING AUTHORS' GROUP]* (2010): Bildung in Deutschland 2010. Ein indikatorengestützter Bericht mit einer Analyse zu Perspektiven des Bildungswesens im demografischen Wandel *[Education in Germany 2010. An indicators-based report including an analysis of the prospects for the educational system within the process of demographic change]*. http://www.bildungsbericht.de/daten/gesamtbericht.pdf (31-05-2011).

BERUFSBILDUNGSGESETZ *[VOCATIONAL TRAINING ACT]* (BBiG) of 23 March 2005 (Federal Law Gazette, BGBl., I p.931, last amended by Article 9b of the Law of 7 September 2007 (BGBl. I p. 2246). URL: http://www.gesetze-im-internet.de/bundesrecht/bbig_2005/gesamt.pdf

BEICHT, Ursula (2009): Verbesserung der Ausbildungschancen oder sinnlose Warteschleife? Zur Bedeutung und Wirksamkeit von Bildungsgängen am Übergang Schule – Berufsausbildung *[An improvement in the individuals chances of undergoing vocational training or a pointless holding pattern? The importance and effectiveness of training programmes for the transition from general schooling to vocational training]*. In: BIBB Report, 11/09. URL: http://www.bibb.de/dokumente/pdf/a12_bibbreport_2009_11.pdf (31-05-2011).

BEICHT, Ursula / WALDEN, Günter (2013): Duale Berufsausbildung ohne Abschluss – Ursachen und weiterer bildungsbiographischer Verlauf *[Dual vocational education and training not leading to a qualification – causes and further training histories]*. Analyse auf Basis der BIBB-Übergangsstudie 2011 *[Analysis on the basis of the 2011 BIBB Transitional Study]*, in: BIBB Report, 21/09. URL: http://www.bibb.de/de/64317.htm (18.06.2013).

BIBB – BUNDESINSTITUT FÜR BERUFSBILDUNG *[FEDERAL INSTITUTE FOR VOCATIONAL EDUCATION AND TRAINING]* (2011): Datenreport zum Berufsbildungsbericht. Informationen und Analysen zur Entwicklung der beruflichen Bildung *[Data Report to accompany the Report on Vocational Education and Training. Information and analyses on the development of vocational education and training].* Bonn.

BIBB – BUNDESINSTITUT FÜR BERUFSBILDUNG *[FEDERAL INSTITUTE FOR VOCATIONAL EDUCATION AND TRAINING]* (2012): Datenreport zum Berufsbildungsbericht. Informationen und Analysen zur Entwicklung der beruflichen Bildung *[Data Report to accompany the Report on Vocational Education and Training. Information and analyses on the development of vocational education and training].* Bonn.

BMBF *[FEDERAL MINISTRY OF EDUCATION AND RESEARCH]* (2012): Durchlässigkeit und Transparenz fördern. DECVET – Ein Reformansatz in der beruflichen Bildung *[Promoting permeability and transparency. DECVET – an approach to reform in vocational education and training]*.

BMBF *[FEDERAL MINISTRY OF EDUCATION AND RESEARCH]* (2007): 10 Leitlinien zur Modernisierung der beruflichen Bildung – Ergebnisse des Innovationskreises berufliche Bildung *[10 guidelines for the modernization and structural improvement of vocational education and training – results from the Innovation in Vocational Training Working Group]*, Berlin. URL: http://www.bmbf.de/pub/IKBB-Broschuere-10_Leitlinien.pdf

BROSI, Walter (2004): Mehr Durchlässigkeit wagen *[Risking more permeability]*. Commentary. In: Berufsbildung in Wissenschaft und Praxis *[Vocational Training in Research and Practice]* No. 6, pp. 3-4

CEDEFOP (2008): Terminology of European Education and Training Policy. A selection of 100 key terms. Luxembourg.

DIHK - DEUTSCHER INDUSTRIE- UND HANDELSKAMMERTAG E.V. *[Association of German Chambers of Industry and Commerce]* (2011): Mit Weiterbildung voran. 7. Umfrage unter Absolventen der IHK-Weiterbildungsprüfung *[Moving forwards with continuing training. 7th survey of those successfully*

completing the Chamber of Industry and Commerce continuing training examinations]. Berlin. URL: http://www.dihk.de/ressourcen/downloads/weiterbildungserfolgsumfrage_2011 (31-05-2011).

EBERHARDT, Christiane / ANNEN, Silvia (2010): Credit systems for lifelong learning, Background Report Germany, URL: http://www.bibb.de/dokumente/pdf/background_report_germany.pdf

EBERHARDT, Christiane / ANNEN, Silvia / KUPFER, Franziska (2011): Credit-Systeme für das lebenslange Lernen *[Credit systems for lifelong learning]*. Interim Report for BIBB Research Project 1.5203, URL: http://www2.bibb.de/tools/fodb/pdf/zw_15203.pdf

GIB *[Association for Innovation Research]* (2011): Analyse der Option zur Anrechnung beruflicher Vorbildung *[Analysis of the option for the credit transfer of prior vocational learning]* (commissioned by the Federal Ministry of Education and Research, BMBF). Final Report, Berlin

EMPFEHLUNG NR. 61 (1984) des Hauptausschusses des Bundesinstitut für Berufsbildung zur Gleichwertigkeit von beruflicher und allgemeiner Bildung vom 11.05.1984 *[Recommendation No. 61 of the Board of the Federal Institute for Vocational Education and Training on the equivalence of vocational and general education of 11.05.1984]*, in: BWP *[Vocational Training in Research and Practice]* 3/1984: http://www.bibb.de/dokumente/pdf/empfehlung_061-gleichwertigkeit_berufl.-allg.bildung_616.pdf (25.05.2013)

EMPFEHLUNG NR. 139 (2010) des Hauptausschusses des Bundesinstitut für Berufsbildung zur Gleichwertigkeit von beruflicher und allgemeiner Bildung vom 15.12.10 *[Recommendation No. 139 of the Board of the Federal Institute for Vocational Education and Training on the promotion of permeability between vocational and higher education of 15.12.2010]*, in: Bundesanzeiger *[Federal Gazette]* No. 10, p. 182. URL: http://www.bibb.de/dokumente/pdf/HA139.pdf (25.05.2013)

EUROPEAN COMMISSION (2009): Recommendation of the European Parliament and of the Council of 18 June 2009 on the Establishment of a European Credit System for Vocational Education and Training (ECVET)
URL: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2009:155:0011:0018:EN:PDF

FROMMBERGER, Dietmar (2009a): "Durchlässigkeit" in Bildung und Berufsbildung: Begriff, Begründungen, Modelle und Kritik *["Permeability" in education and vocational education and training: terminology, justifications, models and criticism]*. In: Profil Nr. 2: Akzentsetzungen in der Berufs- und Wirtschaftspädagogik *[Main focuses in vocational and business education]*, pp. 1-18. - URL: http://www.bwpat.de/profil2/frommberger_profil2.shtml (last accessed: 10.03.2009).

FROMMBERGER, Dietmar (2009b): Transitions and Research on Transitions in VET. ReferNet-Research Report 2009, Bonn, pp.121-156.

GÖTZHABER Jürgen / JABLONKA, Peter/ METJE, Ute Marie (2011): Aufstiegsfortbildung und Studium – Bildungs- und Berufsbiografien im Vergleich *[Upgrading training and higher education study – a comparison of educational and occupational biographies]* In: BMBF – BUNDESMINISTERIUM FÜR BILDUNG UND FORSCHUNG [FEDERAL MINISTRY OF EDUCATION AND RESEARCH] (Ed.): Volume 10 of the series "Vocational Education and Training Research" Bonn, Berlin

HEMKES, Barbara / KÖHLMANN-ECKEL, Christiane / MEERTEN, Egon (2012): Von der experimentellen Entwicklung zur strukturellen Implementierung von Anrechnung – 7 Thesen zur Nutzung der DECVET-Ergebnisse für die Ausgestaltung einer nachhaltigen Durchlässigkeit in der Berufsbildung *[From experimental development to the structural implementation of credit transfer –7 theses on the use of the DECVET results for the establishment of sustainable permeability in vocational education and training]*, in: BMBF *[FEDERAL MINISTRY OF EDUCATION AND RESEARCH]* (2012): Durchlässigkeit und Transparenz fördern. DECVET – Ein Reformansatz in der Berufsbildung *[Promoting permeability and transparency. DECVET – an approach towards reform in vocational education and training]*, pp. 165-168.

IHK FRANKFURT AM MAIN *[FRANKFURT AM MAIN CHAMBER OF INDUSTRY AND COMMERCE]* (UNDATED): Gegenüberstellung des neuen und alten Berufsbildungsgesetzes mit Hinweisen für IHK Unternehmen *[Comparison of the new and old Vocational Training Act with hints for IHK companies]*, URL: http://www.frankfurt-main.ihk.de/pdf/berufsbildung/Kommentare_Berufsbildungsgesetz.pdf (02.05.2013)

JASPER, GERDA; RICHTER, ULRIKE A.; HABER, ISABEL; VOGEL, HENRI: Ausbildungsabbrüche vermeiden – neue Ansätze und Lösungsstrategien *[Avoiding training dropouts – new approaches and solution strategies]* In: BMBF – BUNDESMINISTERIUM FÜR BILDUNG UND FORSCHUNG [FEDERAL MINISTRY OF EDUCATION AND RESEARCH] (Ed.): Volume 6 of the series "Vocational Education and Training Research" Bonn, Berlin

REULING, Jochen (2000): The German "Berufsprinzip" as a model for regulating training content and qualification standards, in: Federal Institute for Vocational Education and Training (Ed.): Vocational Training in Germany. Results, publications and materials from BIBB, pp. 21-40.

REULING, Jochen (2000): Qualifications, unitisations and credits – the German debate, in: Federal Institute for Vocational Education and Training (Ed.): Vocational Training in Germany. Results, publications and materials from BIBB, pp. 83-92.

SCHREIBER, Daniel / GUTSCHOW, Katrin (2013): An investigation of external examination candidates, BIBB Report 20/13, URL: http://www.bibb.de/en/64117.htm (accessed 25.05.2013)

SCHREIBER, Daniel et al. (2012): Anerkennung beruflicher Kompetenzen am Beispiel der Zulassung zur Abschlussprüfung im Rahmen der Externenregelung *[Recognition of vocational competences taking admission to final examination within the scope of the regulations governing external candidates as an example]* (Project 4.3.301), Final Report. Federal Institute for Vocational Education and Training: http://www2.bibb.de/tools/fodb/pdf/zw:43301.pdf

KMK *[Standing Conference of the Ministers of Education and Cultural Affairs]* (2008): Anrechnung von außerhalb des Hochschulwesens erworbenen Kenntnissen und Fähigkeiten auf ein Hochschulstudium *[Credit transfer of knowledge and skills acquired outside the higher education system to a higher education course of study]* (II). URL: http://www.kmk.org/fileadmin/veroeffentlichungen_beschluesse/2008/2008_09_18-Anrechnung-Faehigkeiten-Studium-2.pdf (last accessed on 15.05.2012)

KMK *[Standing Conference of the Ministers of Education and Cultural Affairs]* (2009): Hochschulzugang für beruflich qualifizierte Bewerber ohne schulische Hochschulzugangsberechtigung *[Access to higher education for applicants with vocational qualifications who are not in possession of a school higher education entrance qualification]*. URL: http://www.kmk.org/fileadmin/veroeffentlichungen_beschluesse/2009/2009_03_06-Hochschulzugang-erful-qualifizierte-Bewerber.pdf (last accessed on 15.05.2012)

KMK *[Standing Conference of the Ministers of Education and Cultural Affairs]* (2010): Ländergemeinsamen Strukturvorgaben für die Akkreditierung von Bachelor- und Masterstudiengängen *[Common federal state structural stipulations for the accreditation of Bachelor and Masters courses of study]*. URL: http://www.kmk.org/fileadmin/veroeffentlichungen_beschluesse/2003/2003_10_10-Laendergemeinsame-Strukturvorgaben.pdf (last accessed on 15.05.2012)

KUPFER, Franziska / KOLTER, Christa / KÖHLMANN-ECKEL, Christiane (2012): Analyse und Systematisierung dualer Studiengänge an Hochschulen. Zwischenbericht zum Entwicklungsprojekt 3.3.302 *[Analysis and systematisation of dual courses of study at institutes of higher education. Interim Report for Development Project 3.3.302]*. URL: https://www2.bibb.de/tools/fodb/pdf/zw_33302.pdf (last accessed on 31.05.2013)

KUPFER, Franziska / STERTZ, Andrea (2010): Duale Studiengänge – Angebots-und Nachfragesituation *[Dual courses of study – the supply and demand situation]* In: Berufsbildung in Wissenschaft und Praxis *[Vocational Training in Research and Practice]*, No. 2: Bachelor und Berufsbildung *[Bachelor and VET]*, pp. 37-38.

LE MOUILLOUR, Isabelle (2006): Der Spagat zwischen Differenziertheit und Standardisierung am Beispiel eines Credit Systems für die Berufsbildung *[The quandary between differentiation and standardisation taking a credit system for vocational education and training as an example]*, in: CLEMENT, Ute, LE MOUILLOUR, Isabelle, WALTER, Matthias: Zertifikate und Standards für die berufliche Bildung *[Certificates and standards for vocational education and training]*, Bielefeld, pp. 28-39.

LE MOUILLOUR, Isabelle (2006): Mehr Mobilität in der Berufsbildung! *[More mobility in vocational education and training!]*, URL: http://www.forumbildung.de/templates/imfokus_inhalt.php?artid=619

LE MOUILLOUR, Isabelle, SELLIN, Burkhard, JONES, Simon (2003): Credit transfer in VET: First report on the Technical Working Group on Credit Transfer in VET. Brussels, URL: http://www.voced.edu.au/content/ngv22701 (26.05.2013)

MUCKE, Kerstin (2004): Förderung der Durchlässigkeit zwischen beruflicher und hochschulischer Bildung. Anerkennung von Qualifikationen und Kompetenzen *[Promoting permeability between vocational and higher education. Recognition of skills and competences]*. In: Berufsbildung in Wissenschaft und Praxis *[Vocational Training in Research and Practice]*, No. 6: Durchlässigkeit von Bildungswegen *[Permeability of educational pathways]*, pp. 11-16.

MUCKE, Kerstin (2006): Durchlässigkeit durch Anrechnung! *[Permeability via credit transfer!]* In: Berufsbildung in Wissenschaft und Praxis *[Vocational Training in Research and Practice]*, No. 2: Transparenz und Durchlässigkeit von Bildungswegen *[Transparency and permeability of educational pathways]*, pp. 5-10

SCHÖNGEN, Klaus (2003): Ausbildungsvertrag gelöst = Ausbildung abgebrochen? Ergebnisse einer Befragung [*Training contract dissolved = training dropout? Results of a survey]* In: BWP - Berufsbildung in Wirtschaft und *Praxis [Vocational Training in Research and Practice]*, 32, Issue 05, 35-39.

WURSTER, Bettina (2005): Berufsbildungsgesetz von A bis Z *[Vocational Training Act from A to Z]*, URL: http://www.hk24.de/linkableblob/355246/.5./data/Glossar_zum_BBIG-data.pdf;jsessionid=2828B7C7DC99D4DB63948FCBD4C6459C.repl2 (02.05.13)