The CRAS dimensions might be used to give a language that can be used to glean an overall impression of the demands of a question paper, but this comparison will be somewhat superficial. Such an analysis will fail to elicit the particularities of the demands and their interrelationships that the framework was initially developed to capture (DA6).

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RESEARCH METHODS

Developing a research tool for comparing qualifications

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Abstract

There are thousands of diverse qualifications in the UK. Comparability studies about qualification standards generally use the following as comparators:

- Quality of candidates' performance
- Demand

For new and vocational qualifications, samples of candidates' performance and assessment tasks (e.g. examination questions) can be small or unrepresentative and thereby inappropriate for research purposes. Consequently, researchers employ other comparators including *specification features*, e.g. depth of knowledge. The article details the process of devising a research instrument to compare the features of cognate units from diverse qualifications and subjects. Such an instrument is atypical but valuable for comparability studies.

As part of a wider project about comparing different types of qualifications Kelly's repertory grid interviews elicited knowledge from twelve experts. They represented three subjects and composite, general, vocational and vocationally related qualifications. A secondary thematic analysis of the data was completed. The result was a series of features:

- Learning
- Knowledge
- Summative assessment task
- Qualification system

Each feature had several sub-features. Both features and sub-features served to categorise the interview data. An instrument was derived from the features and sub-features, as well as the researchers' experience of qualifications. The instrument was refined through consultation with colleagues. The instrument in its final form consisted of a series of items relating to possible features of the different specifications. Respondents to the instrument were required to tick a box to indicate that the item applied to the given specification. See Appendix 1 for the full instrument.

A pilot of the instrument indicated that salient features vary somewhat between units. Therefore, as hoped, the research instrument highlighted the similarities and differences between units. This is the case for units of the same type and different types. However, there are no established conventions about how to analyse data. Therefore the instrument is suitable for use in future comparability studies about features, as long as the analysis of results is agreed from the outset. Future research might compare qualifications with data collected using the instrument.

Introduction

The aim of this article is to report the development of a research instrument. This is part of an ongoing project about methods of comparing specifications in a diverse qualifications system. For more details see Novaković and Greatorex (2011).

The instrument in its final form consisted of a series of items relating to possible features of the different specifications. Respondents to the instrument were required to tick a box to indicate that the item applied to the given specification. See Appendix 1 for the full instrument. The

research instrument is for comparing the specification features of cognate units from different types of qualifications. Results from the specification features instrument would highlight the similarities and differences between different specifications. These results might:

- help qualification users to make informed choices between specifications
- set the context for comparisons of what is more and less demanding in different qualifications
- be useful in the revision of specifications.

Concepts and terminology

It is important to consider some central concepts and terminology before explaining the process of developing the instrument.

The *specification (syllabus)* is a description of a qualification. Usually it contains the content (knowledge, skills and competencies), assessment arrangements, performance requirements, guided learning hours, suggested teaching arrangements and so on. A specification is the basis of a course intended to end in an award or certificate[1].

Specification features:

- are important characteristics of a qualification
- are deliberately built into qualifications
- might be explicitly stated in the specification
- might be part of the course intended by the specification
- apply to typical learners, rather than the most/least able learners or learners to whom special considerations apply.

For the remainder of the article, the specification features will be referred to as 'features'. Examples of features are breadth of knowledge and concrete knowledge.

At this stage a definition of features is given without a comprehensive list of illustrative examples of features. The research outlined below was conducted to develop such a list of features which will be the backbone of the research instrument in development.

Context: Qualifications system

The qualification system in England, Northern Ireland and Wales includes several types of qualifications. These include:

- General qualifications (GQs), which are usually academic qualifications. They incorporate the General Certificate of Secondary Education (GCSE) taken by most 16 year olds in England just before the end of compulsory schooling.
- Vocational qualifications (VQs), which are typically designed to recognise learners' competence in the workplace. National Vocational Qualifications (NVQs) are an example of VQs.
- Vocationally-related qualifications (VRQs), which tend to focus on an occupational sector and enhance learners' knowledge and prepare their readiness for employment.
- Principal Learning (PL), which are qualifications, but are also a part of Diplomas[2] along with units from other qualifications such as GCSEs, A levels, NVQs, Functional Skills and so on.

Since 1997 the National Qualifications Framework included all qualifications in England. Each qualification is assigned a level from entry level to level 8. Level 2 is the level prior to the end of compulsory schooling, level 6 qualifications include undergraduate degrees and level 8 qualifications include PhDs. More recently some qualifications were transferred to the Qualifications and Credit Framework (QCF). The QCF aims to show how the different types of qualifications inter relate and allow credit to be transferred between qualifications. It is a credit accumulation and transfer system. The QCF retains the nine qualification levels used in the NQF[3].

There are 139 awarding bodies and over 11,000 different qualifications. In some situations there is more than one qualification in a subject at a particular level that might serve as part of a pathway to further study or a job. For instance, there are 230 level 2 'art' qualifications; these include general, vocational and vocationally-related qualifications associated with 21 different awarding bodies. (For further details about the source of these figures see Appendix 2.)

In this qualification system, centres (schools and colleges) and learners choose between the available qualifications at a particular level. Additionally, admissions staff and employers decide which qualifications they will accept as indicating competence in a vocation or readiness for further study. Therefore, comparability studies which systematically map the similarities and differences might be useful (see Introduction).

There are some instruments which contribute to providing systematic information about features, see for example, QCA (2007a and b). No instrument has been developed (in the UK in the past decade) to compare features of cognate units from different types of qualifications and be suitable for re-use in various subjects. Therefore, these became the goals for the features instrument.

Research strategy

In summary, the three-stage strategy for developing the instrument was:

Stage 1: Identify features by conducting a secondary analysis of data from Kelly's repertory grid interviews with expert subject assessors. It was important to interview expert subject assessors about the specifications to gain their insights about the intentions of the specification as well as their constructs which take a subject assessment community perspective of the specifications.

A document analysis of the specifications by researchers who do not have the subject expertise would not have been as insightful.

Stage 2: Use the features and researchers' experience of qualifications to write items about features. Add instructions to the items to form the instrument. Reduce the length of the instrument in preparation for piloting.

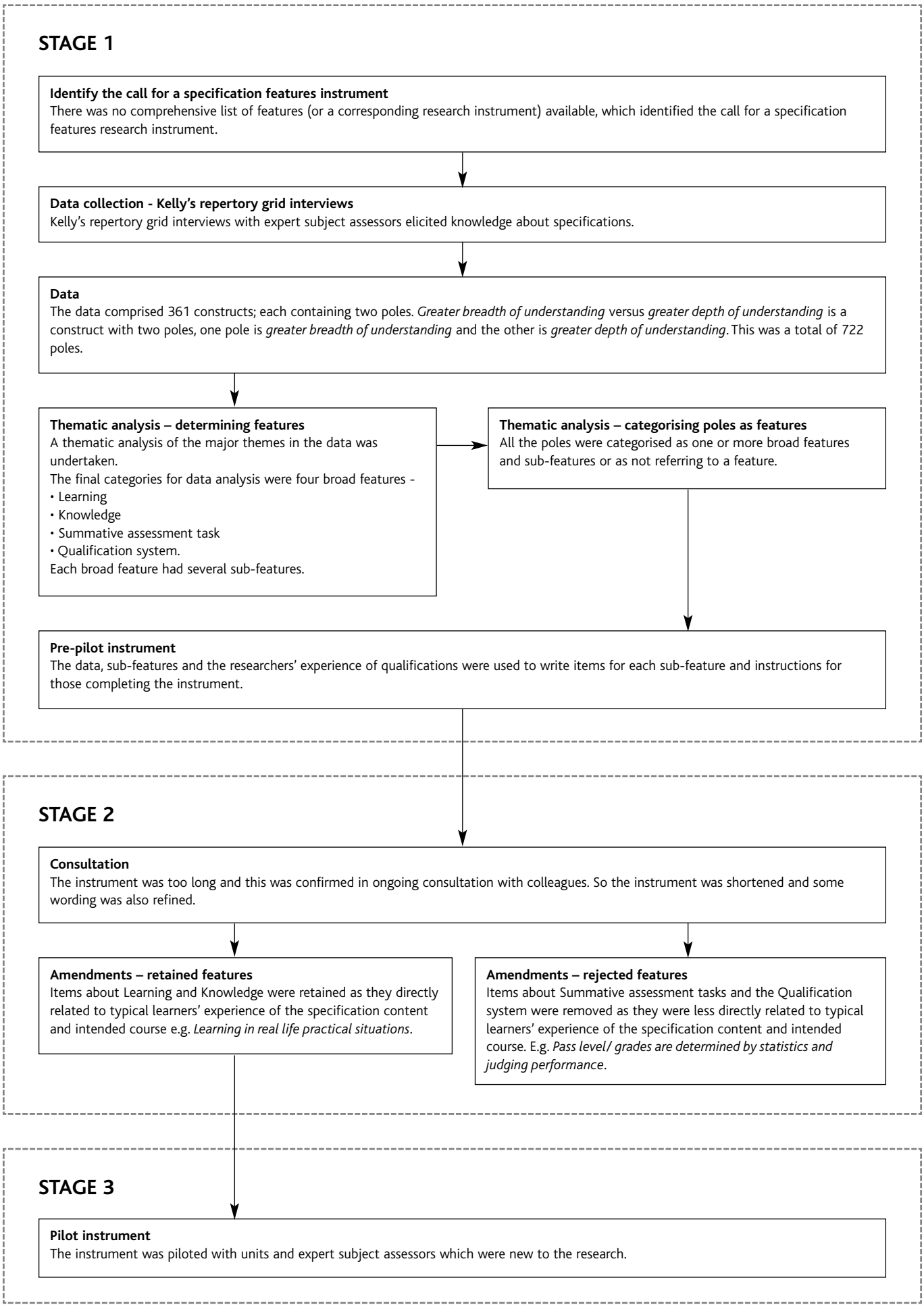
Stage 3: Pilot the instrument.

Figure 1 also summarises the process.

This strategy of combining Kelly's repertory grid interviewing and qualitative analysis is an established strategy for instrument

1. Definitions are also provided by www.examofficers.org.uk/jargon-buster, https://examiners.aqa.org.uk/eap/eap-login/Glossary.action#def27 and http://www.ofqual.gov.uk/help-and-support/94-articles/34-161-glossary#_S; all accessed on 8 December 2010
2. Diplomas are composite qualifications, made up of several free standing qualifications. Some compulsory parts are PL units, Functional Skills in English, Mathematics and ICT. In other areas of the Diploma learners have more choice about which units to study. The Diplomas were first awarded in 2009. Ertl and Stasz (2010) explain that Diplomas are sometimes incorrectly mistaken for VQs.
3. The information is this paragraph is sourced from Ofqual (2010).

Figure 1: Instrument development process



development, see for example Lambert *et al*. (1997), and Edwards and Adams (2002, 2003).

Stage 1: Research to identify features

Method

Interview technique

Kelly's repertory grid (KRG) technique is a well-established research technique for gaining insights into how people view their world. There are several texts about KRG, such as Fransella *et al*. (2004), Beail (1985) and Easterby–Smith (1980).

Easterby–Smith (1980, 4) writes that:

> *A full repertory grid contains three components: "elements", which define the material upon which the grid will be based; "constructs", which are the ways that the subject is grouping and differentiating between the elements; and a "linking mechanism" which can show how each element is being assessed on each construct*.

The KRG interviewing in the present paper is concerned only with the elements (units from a variety of qualifications) and constructs (expert subject assessors' views of how units are similar and different). Repertory grid interview questions generally ask participants how two elements are similar to and different from a third element. This method was applied in the development of this instrument.

Elements

Three subjects were included in the research: Creative and media; Engineering; and Society, health & development. For each subject cognate units were selected as follows:

- Creative and media: one GQ unit, one PL unit and one VRQ unit.
- Engineering: two GQ units, one PL unit and one VRQ unit.
- Society, health and development: one GQ unit, one PL unit, two VQ units and two VRQ units.

There were four GCSE units, three OCR National units, one unit from an OCR Certificate, and two NVQ units. Thus this choice of units included a variety of types of qualification.

Extracts from the specifications were used rather than the whole specification. The extracts contained the following information:

- Aims and objectives
- Unit content
- Grade or performance descriptors (if applicable)
- Assessment and qualification structure
- Information about guided learning hours and length of assessments
- Teaching arrangements.

The removal of any additional information was intended to facilitate and focus the process of eliciting views about the interview topic rather than observations of descriptive differences, such as, variations in specification document layout.

Expert subject assessors

Four expert subject assessors from each subject and with a senior level of responsibility for at least one of the units/qualifications participated. Due to this broad experience the expert subject assessors were well placed to discuss the specifications.

Table 1: Examples of constructs

Number of construct	*Subject*	*Pole 1* *Similarity between units*	*Pole 2* *How a unit(s) was different*
Construct 1	Creative and media	Candidates have ongoing assessment opportunities, so are under less pressure.	Candidates have a single assessment opportunity, so must perform under high pressure.
Construct 2	Engineering	The learner is on their own in the exam.	The learner can ask the presenter for prompts (help) and they can guide the learner in the assignment but not give an answer to the task.
Construct 3	Society, health and development	Some learning and assessment is carried out in unfamiliar situations.	Learning and assessment is mostly carried out in familiar situations.

Interviews

Four interviewers underwent an interview practice and standardisation process prior to interviewing expert subject assessors. These practice and standardisation interviews were undertaken face to face as well as over the telephone with colleagues from Cambridge Assessment.

Two interviewers conducted each interview with each of the expert subject assessors. Prior to the interviews the expert subject assessors were briefed on the task.

To ensure a full complement of expert subject assessors three were interviewed by telephone. The other nine were interviewed face to face.

Secondary analysis – data management and categorising

Strategy and summary

A total of 361 constructs were elicited in the KRG interviews (see Table 1 for examples). All 361 elicited constructs (722 poles) were analysed. Each pole was categorised by a joint panel decision. The panel consisted of three of the four interviewers.

Features

Generally, in thematic analysis researchers read and re-read the data carefully and identify the main themes. The themes are used as categories for the data. The data can be categorised and re-categorised until the researchers arrive at the best categories. Finally, the data in each category are summarised and the relationships between categories are discussed. For further details about thematic analysis see Fereday and Muir-Cochrane (2006), Yawn (2003) and Warner and Griffiths (2006).

Thematic analysis was applied to the KRG data. Reading the poles indicated that some content referred to the teaching and learning situation. For instance, some of the poles contained information about the amount of guidance the learner received from the teacher, or contained information about the breadth of knowledge covered by the specification. Several categories were devised and poles were assigned to categories. However, continual reading and categorising identified further content in the poles. Therefore the categories were revised and the poles re-categorised. Each category was a feature of specifications.

The final categories comprised four broad features each with sub-features (Table 2).

Table 2: Features and sub-features with examples of associated poles

Feature	*Sub-feature*	*Example of pole*	*Subject*
Learning	Level/type of support	Giving someone an essay to write without help or support	Society, health and development
	Familiar and unfamiliar situations	Candidates are taken out of their comfort zone, this develops their personality	Engineering
	Level of interaction/who the learner interacts with	Candidates are required to give, receive and act on peer feedback as part of the group process	Creative and media
	Context of learning, i.e. classroom/practical/ vocational /real life	Closer relationship to business and commercial sector	Creative and media
	Predictability of the situation, how much control the learner has	Candidates have the time and flexibility to experiment, remedy or change direction	Creative and media
	Procedural / declarative knowledge	Technical aspects of setting up for an event (stage management)	Creative and media
	Self-organisation	Organising from own perspective and perspective of others involved	Society, health and development
Knowledge	Breadth/depth of knowledge	Broad knowledge required	Creative and media
	Prior knowledge required for the learning programme	Knowledge base required, needs KS3 as preparation for course	Engineering
	Concrete knowledge	Candidates are required to demonstrate spatial ability	Engineering
	Abstract knowledge	Candidates are required to have knowledge of values	Society, health and development
Summative assessment task	Level/type of support	The learner can ask the presenter for prompts (help) and they can guide the learner in the assignment but not give an answer to the task	Engineering
	Number of summative assessment opportunities	No ability to upgrade evidence. Only change through retakes	Society, health and development
	Familiar and unfamiliar situations	Learning and assessment is mostly carried out in familiar situations	Society, health and development
	Level of interaction/who the learner interacts with	Group works together for whole of examined time	Creative and media
	Context of assessment, i.e. classroom/practical/ vocational/real life	Controlled assessment – all done in classroom (except preparation)	Creative and media
	Predictability of the situation, how much control the learner has	Candidates have to effectively manage and organise their time in order to complete the assessed tasks in a short time period	Creative and media
	Procedural/declarative knowledge	Requires learners to assimilate knowledge in order to produce portfolio evidence	Society, health and development
Qualification system	Available certification outcomes	Range of grades between A–C (Dip), National (A–C), GCSE (A–G)	Society, health and development
	Referencing style	Learning outcomes, assessment criteria and exemplifications, and grade descriptors are provided	Engineering
	Mode of evidence	Blend of written evidence and portfolio evidence (could be presentation etc.)	Society, health and development
	Mode of assessment	Model assignment produced by board or tutor written assignment	Society, health and development
	Who makes assessment judgements	Examiner assessed	Creative and media

Notes:

Level/type of support refers to "Level/type of support (e.g. independent performance/unstructured task versus help provided/structured task)".

Predictability of the situation, how much control the learner has refers to:

- Predictability of the situation
- How much control the learner has/time/time pressure/ deadlines and the flexibility of time and deadlines
- Pressured decision making versus on going decision making

Dealing with uncertainty versus responding to routine situations.

Knowledge refers to "Characteristics of the knowledge learners are exposed to".

Summative assessment task refers to "Summative assessment task and gathering evidence of achievements for a portfolio/equivalent".

Available certification outcomes is short for "Available certification outcomes-pass or fail/range of grades (or equivalent) available/range of levels available"

Referencing style is short for "Referencing style – Criterion referenced/cohort referenced/compensation/norm referenced/ descriptor referenced (judgement of best fit)/hurdles"

Mode of evidence is short for "Mode of evidence – response to a standardised test or task (such as a script)/portfolio/verbal evidence/written evidence/another form of performance evidence"

Mode of assessment is short for "Mode of assessing – standardised test or task (such as an examination)/verbal questioning/task determined by the candidate/task determined by the assessor/teacher (but not a standardised task)"

Who makes summative assessment judgements is short for "Who makes assessment judgements – external examiner/ internal assessor"

Judgement process

First, each pole was categorised as belonging to none, one, or more of the following features:

- Learning
- Knowledge
- Summative assessment task
- Qualification system.

Secondly, each pole was categorised with one or more of the sub-features in.

Consensus was reached through panel discussion. Once all the data were categorised into features and sub-features the panel revisited the data to confirm the decisions.

Table 2 contains examples of poles, the features and sub-features they were assigned to and the subject in which the pole was situated.

Findings

This section considers the results of the analysis.

Table 3 presents the frequency of expert subject assessors whose KRG data included one or more poles assigned to each sub-feature. The data are also organised by subject and type of qualification. It can be seen that most features related to all three subjects and all four qualification types.

Some poles did not refer to features but referred to topics such as the stakeholders involved in writing the specification. Therefore they were excluded from the instrument development process.

Stage 2: Using research evidence to write a features instrument

The next stage in development was to write the features instrument from the research results.

The panel wrote items for each sub-feature and instructions for those completing the features instrument. The data, the sub-features and the panel's experience of qualifications were used in this process. The features and items are provided in Table 4. The items were about features.

Throughout the process of instrument development colleagues were consulted. The ongoing consultation suggested that the instrument was too long and that some wording needed refining. To shorten the instrument the items about the features 'Summative assessment task' and 'Qualification system' were removed as they were less directly related to typical learners' experience of the specification content and intended course, for example, typical learners might not know whether *'Pass level/ grades are determined by statistics and judging performance'*. The features 'Learning' and 'Knowledge' were retained as they were directly related to typical learners' experience of the specification content and intended course, for example, *Learning in real life practical situations*. It was not possible to reduce the length of the instrument by integrating similar items into one item as each item was about a different topic.

The next stage was piloting the instrument.

Table 3: Frequency of expert subject assessors whose KRG data included the presence of poles assigned to each sub-feature

Features		*Creative and media*			*Engineering*			*Society, health & development*			
		GQ	*PL*	*VRQ*	*GQ*	*PL*	*VRQ*	*GQ*	*PL*	*VQ*	*VRQ*
Learning	Level/type of support	3	4	3	3	3	3	3	3	4	3
	Familiar and unfamiliar situations	1	1	1	2	1	2	1	1	1	1
	Level of interaction/who the learner interacts with	2	4	1	2	1	3	3	3	3	1
	Context of the assessment i.e. classroom/practical/vocational/real life	4	4	4	3	3	4	3	4	3	2
	Control/time pressure/decision making	3	4	4	2	2	1	2	2	3	1
	Procedural/declarative knowledge	4	4	4	4	2	3	2	1	3	2
	Self organising versus set structure	1	1	1	1	1	1	2	2	1	1
Knowledge	Breadth and depth	4	4	3	4	3	4	4	4	4	3
	Prior knowledge required for the learning programme	1	0	0	2	1	0	0	1	0	0
	Concrete	4	4	4	4	4	4	3	4	4	3
	Abstract	0	0	1	0	0	0	2	2	2	3
Qualification system	Available certification outcomes	0	0	1	0	0	0	2	2	2	2
	Referencing style	0	1	1	0	1	0	0	0	0	0
	Mode of evidence	2	2	1	0	0	0	0	0	0	1
	Mode of assessment	0	0	0	0	0	0	1	0	0	1
	Who makes summative assessment judgements	1	1	0	0	0	0	0	0	0	0
Summative assessment task	Level/type of support	0	0	1	1	1	0	2	2	1	2
	Number of summative assessment opportunities	1	1	1	0	0	0	2	1	0	1
	Familiar and unfamiliar situations	0	0	0	0	0	0	1	1	0	1
	Level of interaction/who the learner interacts with	1	1	0	0	1	0	0	0	0	0
	Context of the assessment i.e. classroom/practical/vocational/real life	2	1	1	2	2	1	0	2	1	0
	Control/time pressure/decision making	2	2	1	4	3	2	2	2	1	2
	Procedural/declarative knowledge	1	0	0	1	1	0	1	1	0	1
	Self organising versus set structure	1	0	0	0	0	0	0	1	0	0

Table 4: Features and resulting items

Feature	*Items*
Learning	
Level/type of support	Learning through independent performance Learning supported through help provided Learning through structured tasks Learning through unstructured tasks
Familiar and unfamiliar situations	Learning in familiar situations Learning in unfamiliar situations
Level of interaction/who the learner interacts with	Learner works individually Learner works in a group Learner interacts with the public Learner interacts with other learners as part of learning
Context of the learning i.e. classroom/practical/ vocational/real life	Learning in the classroom Learning in real life practical situations Learning through situations that simulate real life
Control/time pressure/ decision making	Learning is time pressured Learning is not time pressured Learning has deadline Learner has control over the learning situation Learner has limited or no control over the learning situation
Procedural/declarative knowledge	Learner develops procedural knowledge Learner develops factual knowledge
Self organising versus set structure	Learner organises their own time to complete task Learner works to an imposed timetable
Knowledge	
Breadth and depth	Learner develops broad knowledge Learner develops narrow range of knowledge Learner develops in-depth knowledge Learner develops basic knowledge Learner assessed on broad knowledge Learner assessed on narrow range of knowledge Learner assessed on in-depth knowledge Learner assessed on basic knowledge
Prior knowledge required for the learning programme	Prior knowledge required for learning No prior knowledge required for learning
Concrete	Learner develops concrete knowledge Learner assessed on concrete knowledge
Abstract	Learner develops general understanding and awareness Learner assessed on general understanding and awareness Learner develops abstract knowledge Learner assessed on abstract knowledge
Qualification system	
Available certification outcomes	Certification outcomes are pass and no pass (or equivalents) Certification outcomes are a series of grades (or equivalents)
Referencing style	Pass level/grades are determined by criteria which learners must meet Pass level/grades are determined by statistics and judging performance Pass level/grades are determined by statistics only Pass level/grades work on a principle of compensation (strengths are rewarded and no credit is lost for weaknesses) Pass level/grades include hurdles (one aspect of learners' performance must meet a particular criterion but the rest of the performance is judged differently) Applying a judgement of best fit
Mode of evidence	Learners can be assessed on their written evidence Assessment includes another form of evidence
Mode of assessment	All learners are assessed using the same task/exam Assessment tasks vary with centres/learners All learners are assessed on their portfolios Assessment includes verbal questioning and responses The assessment task is determined by the learner The assessment task is determined by an assessor
Who makes summative assessment judgements	An external assessor makes assessment judgements An internal assessor makes assessment judgements
Summative assessment task	
Level/type of support	Assessed on independent performance Assessment is supported through help provided Assessed on structured tasks Assessed on unstructured tasks
Number of summative assessment opportunities	Unlimited assessment opportunities Limited assessment opportunities
Familiar and unfamiliar situations	Assessment in familiar situations Assessment in unfamiliar situations
Level of interaction/who the learner interacts with	Learner produces individual work for assessment Learner works in a group for assessment Learner interacts with the public as part of assessment Learner interacts with other learners as part of assessment
Context of the assessment i.e. classroom/practical/ vocational/real life	Assessment in the classroom Assessment in real life practical situations Assessment in situations that simulate real life
Control/time pressure/ decision making	Assessment is time pressured Assessment is not time pressured Assessment has deadlines Assessment has no deadlines Learner has control over the assessment situation Learner has no control over the assessment situation
Procedural/declarative knowledge	Learner assessed on procedural knowledge Learner assessed on factual knowledge
Self organising versus set structure	Learner organises their own time for assessment Learner works to an imposed timetable

Stage 3: Pilot of the features instrument

The purpose of the features research instrument is to compare the characteristics of knowledge and learning associated with cognate units from different types of qualifications, such as vocational and general qualifications. Therefore, the following research question is posed:

> *Is the research instrument appropriate for use in research studies? (i.e. do research results from the research instrument compare between the different types of units?)*

It was considered useful to also investigate whether the results from the instrument compare between units of the same type, and this became a subsidiary research question.

Method

Units

Four cognate level two units in Health were selected, two from an NVQ, one from a current GCSE and one from a legacy GCSE. For the purposes of this article the units were called NVQ1, NVQ2, GCSE1 and GCSE2. None of the units had been used in earlier parts of the research.

Expert subject assessors

Four expert subject assessors were recruited. The criteria for selection were that they:

- were a Team Leader, Assistant External Verifier or above for one of the qualifications
- were recommended by OCR
- did not participate in earlier parts of the research.

The first two criteria are used in some other comparability studies. The expert subject assessors were paid volunteers.

Materials

The expert subject assessors were provided with the instrument (see Appendix 1) and specification extracts.

Procedure

The expert subject assessors completed the instrument remotely and individually, then returned it to the Research Division. The data collection took place in December 2010.

Table 5: Frequency of responses

		NVQ1	*GCSE1*	*NVQ2*	*GCSE2*
1	Learning through independent performance	4	3	4	4
2	Learning supported through help provided	4	4	4	4
3	Learning through structured tasks	2	4	2	4
4	Learning through unstructured tasks	4	1	4	1
5	Learning in familiar situations	2	2	3	2
6	Learning in unfamiliar situations	4	2	3	3
7	Learner works individually	3	3	4	3
8	Learner works in a group	3	2	3	2
9	Learner interacts with the public	3	1	3	2
10	Learner interacts with other learners as part of learning	3	3	3	4
11	Learning in the classroom	2	4	2	4
12	Learning in real life practical situations	4	2	3	3
13	Learning through situations that simulate real life	4	4	2	4
14	Learning is time-pressured	1	3	2	2
15	Learning is not time-pressured	4	2	4	3
16	Learning has deadlines	1	4	3	2
17	Learning has no deadlines	3	1	1	2
18	Learner has control over the learning situation	3	1	3	2
19	Learner has limited or no control over the learning situation	1	3	1	3
20	Learner develops procedural knowledge	3	4	3	2
21	Learner develops factual knowledge	4	4	4	4
22	Learner organises their own time to complete task	3	1	3	1
23	Learner works to an imposed timetable	1	3	1	3
24	Learner develops broad knowledge	3	4	3	2
25	Learner develops narrow range of knowledge	1	0	1	2
26	Learner develops in-depth knowledge	2	3	3	2
27	Learner develops basic knowledge	3	2	2	3
28	Prior knowledge required for learning	2	1	2	2
29	No prior knowledge required for learning	4	3	3	3
30	Learner develops concrete knowledge	4	4	4	4
31	Learner develops general understanding and awareness	2	4	2	4
32	Learner develops abstract knowledge	3	2	4	3

Findings

Do research results from the research instrument compare between the different types of units?

The features are relevant to some units beyond those used in Stage 1 of the development. As Table 5 shows at least one expert subject assessor thought each feature was relevant to each unit. The exception was one feature (25) and one unit (GCSE1).

The results can be used to identify similarities between units. For instance, Table 5 shows expert subject assessors agreed the following items were common to all units:

- (2) Learning supported through help provided
- (21) Learner develops factual knowledge
- (30) Learner develops concrete knowledge

The results for all three items above show comparisons can be made between the features of cognate units of the same type (i.e. NVQ1 and NVQ2; GCSE1 and GCSE2) or different types (e.g. NVQ1/NVQ2 and GCSE1/GCSE2).

The results can be used to identify differences between units. An example is that all four expert subject assessors agreed (12) *Learning in real life practical situations* was relevant to NVQ1 but there was less agreement on whether this feature was relevant to each of the other units (Table 5). This example illustrates that comparisons can be made between the features of cognate units of the same type (i.e. NVQ1 and NVQ2) or different types (e.g. NVQ1 and GCSE1/GCSE2).

Therefore, as hoped, the research instrument highlighted the similarities and differences between units. This was the case for units of the same type and different types.

Conclusion

This article describes the development of a features instrument. The instrument was intended to:

- Compare features of cognate units from different types of qualifications
- Be suitable for re-use in various subjects.

The instrument (Appendix 1) is considered appropriate because it is based on expert subject assessors' views. The instrument presents a list of specification features derived from the perspective of expert subject assessors. The list of specification features is given in the form of items. Their expert views contextualised the specifications in the appropriate subject assessment community to formulate constructs. A document analysis of the specifications by researchers who do not have the subject expertise would not have been as insightful. That the expert subject assessors represented three subjects and different types of qualifications adds credibility to the resulting instrument. Additionally, the features and instrument read as if they apply to all types of qualifications in the research and various subjects beyond the three studied here. The pilot study indicated that salient features vary somewhat between units. Therefore, as hoped, the research instrument highlights similarities and differences between units, and this is the case for units of the same type and different types.

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APPENDIX 1 — Features research instrument

Instructions

This research instrument was developed to systematically list features of different level 2 specifications and identify which features are present in different specifications.

Listed in the instrument are features of learning and knowledge which some specifications intend typical level 2 learners to experience.

Please read the list carefully and tick the boxes to indicate the relevant features. These features may be explicit in the specifications or implicit and part of an underpinning ethos.

If you find there are additional features intended by the specification which are not in the list, please add them in under 'other' at the end of the instrument.

Please ensure you have familiarised yourself with the specifications before starting this task.

Feature	Indicate if feature is present in			
Questions 1 to 19 are about **Learning**	NVQ1	GCSE1	NVQ2	GCSE2
1 Learning through independent performance				
2 Learning supported through help provided				
3 Learning through structured tasks				
4 Learning through unstructured tasks				
5 Learning in familiar situations				
6 Learning in unfamiliar situations				
7 Learner works individually				
8 Learner works in a group				
9 Learner interacts with the public				
10 Learner interacts with other learners as part of learning				
11 Learning in the classroom				
12 Learning in real life practical situations				
13 Learning through situations that simulate real life				
14 Learning is time-pressured				
15 Learning is not time-pressured				
16 Learning has deadlines				
17 Learning has no deadlines				
18 Learner has control over the learning situation				
19 Learner has limited or no control over the learning situation				

Feature Questions 20 to 32 are about **Knowledge**	Indicate if feature is present in			
	NVQ1	GCSE1	NVQ2	GCSE2
20 Learner develops procedural knowledge				
21 Learner develops factual knowledge				
22 Learner organises their own time to complete task				
23 Learner works to an imposed timetable				
24 Learner develops broad knowledge				
25 Learner develops narrow range of knowledge				
26 Learner develops in-depth knowledge				
27 Learner develops basic knowledge				
28 Prior knowledge required for learning				
29 No prior knowledge required for learning				
30 Learner develops concrete knowledge				
31 Learner develops general understanding and awareness				
32 Learner develops abstract knowledge				

Other features Use this space to add any features intended by the specification which you feel have not been covered.	Indicate if feature is present in			
	NVQ1	GCSE1	NVQ2	GCSE2

To request permission to use or adapt the features research instrument write to Jackie Greatorex, Research Division, Cambridge Assessment, 1 Regent Street, Cambridge CB1 2EU.

APPENDIX 2 — Searches of the national database of accredited qualifications (NDAQ)

Search options			*Results*		
Subject	*Type*	*Level*	*Matches*	*NDAQ Types*	*Awarding bodies*
All	All	All	11258	EL (Entry Level) ESOL (English for Speakers of Other Languages), FS NQF (Functional Skills National Qualifications Framework) GCE (General Certificate of Education) GCE AS (General Certificate of Education Advanced Subsidiary) GCSE (General Certificate of Education) HL (Higher Level Qualifications) NVQ (National Vocational Qualification) OG (Other General Qualification) OQ (Occupational Qualification) PL (Principal Learning) PROJ (Project) QCF (Qualification and Credit Framework) VRQ (Vocationally-Related Qualification)	139
Art	-	2	230	GCSE, NVQ, OG, OQ, QCF, VRQ	21
Business	-	2	162	ESOL , GCSE, NVQ, OG, OQ, PL, VRQ	25

Notes:
1. The National Database of Accredited Qualifications (NDAQ) held details of qualifications that are accredited by the qualification regulators in England (Ofqual), Wales (DCELLS) and Northern Ireland (CCEA) http://www.accreditedqualifications.org.uk /index.aspx:
2. All the searches were restricted to current qualifications and qualifications offered in English language only.
3. Awarding bodies is used here to refer to awarding bodes and collaborations between awarding bodies.