Cathy Benson and Kenneth Anderson

Reviewing the literature: The genesis of a writing course for PhD students

Introduction

In the EAP department of a Scottish university, we have for several years offered in-sessional academic writing courses for PhD students at earlier and later stages of their academic journey. However, we felt that the lack of support for students between their initial and final years constituted a large gap in our provision. We therefore decided to offer second-year students a course in *Reviewing the Literature*. While well aware that reviewing the literature in their field is ongoing throughout the doctoral process, we believed the timing would be appropriate. This paper recounts the story of the course, from its birth to its evaluation, starting with library research to familiarise ourselves with previous work in this area: handbooks for supervisors and students, as well as published research. We then report on the research we carried out in our own university; in order to design a course that would match student needs as far as possible, we investigated what supervisors expect of a literature review, what challenges doctoral students face when reviewing literature and what students wanted to see in a course designed to help them tackle this element of their thesis. We present an outline of the course we subsequently designed, before sharing student and tutor feedback. Sample course materials are included in the appendices.

Published work on writing literature reviews: Handbooks

We began by consulting handbooks aimed at supervisors and students. Paltridge and Starfield (2007) has a very useful section on reviewing literature, in a chapter entitled 'Background'; and Kamler and Thomson

(2014) contains an interesting chapter on 'Reconsidering the personal', covering such topics as the use of 1st-person pronouns.

The student guide that we drew on most extensively was Ridley (2012), which was very thorough, and helpful for all stages of reviewing literature, from finding sources to referring to literature in discussion chapters. Thomas (2016), a more general volume, included a brief but interesting chapter on reviewing literature, and contained useful advice about the whole thesis-writing process.

Published work on writing literature reviews: Research articles

We identified over 40 journal articles from a wide range of academic and professional fields which addressed the writing of scholarly literature reviews (LRs) from various perspectives. Here we mention three which offer insights we cite in our materials.

According to Boote and Beile (2005), US doctoral programmes in education were failing to prepare candidates adequately for scholarship because of the low priority given to teaching LR writing. Following Hart (1999), they argue that constructing a sophisticated LR, which not only relates the study to existing research, but, crucially, presents a coherent argument for the necessity of the current research and a sound justification for the research methods used, is vital in developing the scholarship skills which underpin successful research.

Boote and Beile propose a framework (adapted from Hart) for evaluating LRs in doctoral dissertations, which we use in a task in which students compare their own ideas of what constitutes a successful LR with the characteristics proposed by the supervisors we surveyed, and with Boote and Beile's criteria (Table 1).

Table 1 Boote and Beile's criteria (adapted from Hart, 1999) for evaluating the quality of LRs in doctoral dissertations in education. Adapted from Boote and Beile (2005, p. 8).

Category	Criterion
1. Coverage	A. Justified criteria for inclusion and exclusion from review.
2. Synthesis	B. Distinguished what has been done in the field from what needs to be done. C. Placed the topic or problem in the broader scholarly literature. D. Placed the research in the historical context of the field. E. Acquired and enhanced the subject vocabulary. F. Articulated important variables and phenomena relevant to the topic. G. Synthesized and gained a new perspective on the literature.
3. Methodology	H. Identified the main methodologies and research techniques that have been used in the field, and their advantages and disadvantages. I. Related ideas and theories in the field to research methodologies.
4. Significance	J. Rationalized the practical significance of the research problem. K. Rationalized the scholarly significance of the research problem.
5. Rhetoric	L. Was written with a coherent, clear structure that supported the review.

Boote and Beile's criteria reveal slightly different priorities from those of our supervisors, none of whom, interestingly, mentioned the discussion of methodology, considered by Boote and Beile as a crucial LR component in educational research.

Kwan (2006), in a genre analysis of LRs, refers to a useful typology of possible thesis formats, with potential implications for locating and structuring LRs, which features in our unit on organisation and structure:

ILrMRD: (Introduction – Literature review – Methodology – Results – Discussion). Kwan terms this the 'traditional' format (though this may reflect her Applied Linguistics perspective and may not be so regarded in fields where research is non-empirical – see below).

Article compilation: 'an anthology of individual publishable research papers' (ibid., p. 31). Here, the works included in the portfolio would each separately review the literature relevant to the specific research.

Topic-based: '[a thesis] that begins with a chapter that is headed 'Introduction' and ends with a chapter headed 'Conclusion'. The chapters in-between are headed according to the topics and sub-topics of the writer's investigation' (ibid.). We use an Education thesis to exemplify this; it follows this pattern because it takes the form of a theoretical, *a priori* argument, rather than reporting and discussing empirical findings.

Kwan found that chapters devoted to reviewing literature (often more than one in a thesis) often conformed to an overall Introduction – Body – Conclusion structure; Ridley (2012) makes a similar point. As we point out in our Organisation and Structure unit, this structure is also frequently employed in sections within chapters. However, she also notes that 'not all theses contain a recognizable literature review' (Kwan, 2006, p. 35), and this was confirmed by our own research (see below). As Kwan points out, the pedagogical literature on thesis writing often conflates 'Introduction' and 'Literature Review', and indeed she found similar rhetorical patterns in LR chapters to those in Bunton's (2002) revised 'Create a Research Space' (CARS) model for thesis introductions (based on Swales, 1990), though employing some different strategies.

The analysis of academic genres by rhetorical moves is of course a central pedagogical tool in EAP. In view of the brevity of our current course, we presented only a paraphrase of three of Swales' CARS 'step' descriptors for Move 2 'Establishing a niche' (Swales, 1990, p. 141) which were evidenced in our own samples:

- Indicating a gap in existing research
- Raising new questions
- Continuing and building on a tradition

A longer course might very usefully exploit the level of detail offered in Kwan's analysis (Appendix 1).

One further article that informed our materials was Cisco (2014), which offers a particularly vivid visual representation of the process of theme creation in synthesising research findings, with each theme symbolically represented as a separate bucket, where the relevant sources can be placed:

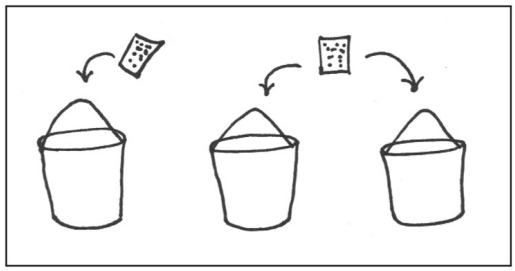

Figure 1 Bucket graphic – synthesising research (Cisco, 2014, p. 49)

His next suggested step is to produce an outline of the LR, which is 'idea-driven, as opposed to author-driven'.

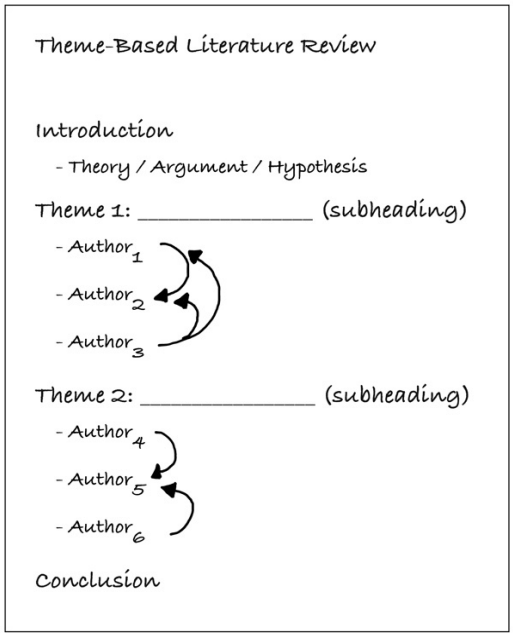

Figure 2 Outline for theme-based literature review (Cisco, 2014, p. 50)

Our students often tell us that they are aware of the need to synthesise sources, rather than simply listing the studies they have read, but they lack confidence in doing so, frequently claiming that it is the single most difficult aspect of reviewing literature. They appreciate the clarity with which Cisco visuals elucidates this important process.

Our research

As well as exploring the general literature on the topic, we felt it was crucial to carry out some research in our own local context before creating the course. The aim was to investigate the expectations of supervisors at our university regarding reviewing the literature, as well as the experiences of PhD students and the main challenges they face. This was achieved through surveys of supervisors, and interviews with PhD students.

Supervisor voices

An open-ended questionnaire (Appendix 2) was emailed to PhD supervisors around the university. We received 17 responses from supervisors from a wide range of disciplines: Biomedical Sciences, Veterinary Sciences, GeoSciences, Informatics, Education, Linguistics and English Language, and History.

We focus here on their responses to the question: 'What do you consider to be the main characteristics of a successful Literature Review?' We identified seven broad themes: good, logical structure; clarity of expression; comprehensive coverage; clear focus and relevance; coherent, evidence-based argumentation; stance/critical evaluation; and reflecting positive characteristics of the student, e.g., 'thoughtful', 'demonstrates understanding'.

There were some interesting disciplinary differences. Several questioned the legitimacy of a separate 'LR' genre in their discipline. In Biomedical Sciences, the term 'Literature Review' seemed unfamiliar to at least one

respondent: 'I'm not sure what you mean by "literature review" so I am going to translate it as "introductory chapter"'. Another advised against using the term, because '… it has the connotations of needing to be comprehensive. I don't think that is right. To the contrary, it should be an introduction to the thesis. Maybe Scholarly Introduction is a better term.' Such comments from biomedical scientists confirm Ridley's claim (2012, p. 11) that Medicine is an example of a field where 'the complete literature review may appear as part of the introduction'. A historian expressed quite vehement opinions: 'I tell the students to "write it like a book". Obviously, they have to read and understand – and show awareness of – the literature. But they do that through real scholarly processes. The "Lit Review" is an artificial exercise. If it were to become mandatory in my discipline, I would regard this as dumbing down. In view of the above, I see no need for a course in how to write a "Lit Review chapter". A course in how to be a scholar, maybe.' In view of such comments, the course title was changed from 'Writing the Literature Review' to 'Reviewing the Literature'.

We requested samples of PhD LRs deemed successful by respondents, but the only ones forthcoming were from Applied Linguistics and Education. This represented a clear limitation, in terms of both the research and the course design.

Student voices

We invited students from our 3rd-year PhD courses to participate in interviews, believing that they could bring a wealth of experience to their responses; eight volunteered. They represented four continents and (as with the supervisors) a range of disciplines: History of Science, Applied Linguistics, Literature, Architecture, Medicine, Nursing Studies, Health Science and Environmental Sciences.

Through the interviews, we sought to ascertain students' understanding of the purpose of a LR, and of their supervisor's and examiners' expectations; what they considered to be the most difficult aspects of writing a LR; and what they would like included in a writing course dedicated to LRs. We focus on the last two questions, which probably had the greatest influence on our course design.

Regarding difficulties and challenges, some of the most common themes to emerge were the sheer amount of reading required, and the need to make decisions as to selection of sources to cite; the issue of how to organise their text according to principles (rather than just providing a list) and how to group arguments. The challenge of taking a critical approach, and expressing one's own voice was cited by several, with some feeling that they were not 'qualified' to be critical. Language issues were described by one as 'frustrating', as students struggled to find the precise words to express their message; also problematic were differences in academic discourse from their home culture.

When asked about the content of a course about reviewing literature, students asked for a focus on typical language used in a LR, e.g., common grammar and vocabulary, and a focus on organisation and structure. They emphasised the value of being given models and samples to analyse (some specified from their own field, others were not concerned), and having 'space' to draft sample LR extracts and receive feedback and guidance from the tutor. These suggestions mirrored and reinforced ideas we had already considered before embarking on our research, facilitating our design of

the course; we felt ready to respond to their concerns and incorporate their requests. We should note here that we did not include the writing of Systematic Literature Reviews (a comprehensive review of all appropriate and relevant sources) in the course; as our data indicated that this would not reflect what the majority of our students needed. Our university's Information Services does provide guidance on this topic.

One cause for concern arising from the interviews was the very varied levels of support from PhD supervisors that were reported; however, there is very little we could do to influence supervisors' attitudes, and we suspected it was a perennial issue.

The course content: Outline and approach

We created a five-week course, consisting of the following units, designed to increase the level of challenge over the duration of the course:

Week 1: Basic issues: Criteria for success, purpose, citation skills
Week 2: Organisation and structure
Week 3: Expressing your voice and writing critically
Week 4: Synthesising sources
Week 5: Individual tutorials

The course concluded with individual 30-minute tutorials with the EAP tutor, where students could bring their work, and their remaining questions and doubts.

When introducing the course, we tell students how we devised the materials, based on research, and analysis of some sample (successful) PhD theses, and we explain that summaries of frequently used language features will be included. The teaching approach includes group discussion, and tasks involving analysis of texts, including extracts from successful theses. A weekly written task is assigned (Appendix 3), intended to allow students the opportunity to produce extracts of the kind of text which they would need to write while working on their theses; these are emailed to their teacher, and individual feedback is given in the following class. The assignments are not compulsory, but we encourage students to submit them, in order to benefit fully.

Below is a taxonomy of task-types and activities included in the course:

- Discussing expectations (of supervisors and potential examiners)
- Critiquing student writing (evaluating the effectiveness of paraphrasing and summarising)
- Analysing the language and structure of sample texts from former PhD students' theses
- Re-ordering texts
- Focus on language: noticing (e.g., signposting language; language to express stance)
- Focus on language: production (e.g., filling gaps in a text with appropriate discourse markers)
- Brief writing tasks (e.g., synthesising information into a single paragraph)

Samples of the last three types are provided in Appendix 4.

The course evaluation

The current requirement for course evaluation surveys to be standardised and administered electronically leads, unfortunately, to a low response rate. Among those who do respond, the course

is usually rated very highly. Open-ended questions have elicited such comments as:

> *The course gives you guidelines on how to write LR in appropriate ways. I think these courses are essential for any theses. I recommend them to everyone in my department; the course enables me … knowing how to craft a proper literature review; Best writing course ever!*

Course tutor feedback has consistently been positive:

> *The course – as always – was very good and I felt satisfied it had what I thought was important for the students to learn.*

There is still potential for development, however, in view of a small number of comments like:

> *Overall, I found the course was useful for students in qualitative research. But there was hardly anything specific for quantitative research.*

We hope to rectify this lacuna by obtaining sample texts from a wider range of disciplines.

To conclude, we feel that the model followed, of reviewing relevant literature, surveying supervisors and interviewing students, has been a very effective method of preparing to develop a new course. This is borne out by the feedback, with the above-mentioned caveat. We also believe that it is important to make students aware, as researchers themselves, of the process involved in creating the course.

References

Baeshin, S. (2016). *Impact of workshops on seven EFL teachers' beliefs and practices concerning L1 use in a Saudi Arabian university* [Unpublished PhD thesis]. University of Edinburgh.

Boote, D. N., & Beile, P. (2005). Scholars before researchers: On the centrality of the dissertation literature review in research preparation. *Educational Researcher*, *34*, 3–15.

Bunton, D. (2002). Generic moves in Ph.D. thesis introductions. In J. Flowerdew (Ed.), *Academic discourse* (pp. 57–75). London: Pearson Education.

Cisco, J. (2014). Teaching the literature review: A practical approach for college instructors. *Teaching and Learning Inquiry: The ISSOTL Journal, 2*, 41–57. Retrieved from http://muse.jhu.edu/journals/teaching_and_learning_inquiry__the_issotl_journal/v002/2.2.cisco.html.

Czinkota, M. R., & Ronkainen, I. A. (1988) *International business*. New York: Oxford University Press.

Gourlay, L. (2003). *Classroom discourse and participation in an English for Specific Purposes context* [Unpublished PhD thesis]. University of Edinburgh.

Hart, C. (1999). *Doing a literature review: Releasing the social science research imagination.* London: SAGE.

Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations*. Thousand Oaks, California: Sage Publications.

Kamler, B., & Thomson, P. (2014). *Helping doctoral students write: Pedagogies for supervision* (2nd ed.). Abingdon: Routledge.

Kluckhohn, C. (1951). The study of culture. In D. Lerner, & H. D. Lasswell (Eds.), *The Policy Sciences* (p. 86). Stanford, California: Stanford University Press.

Kwan, B. (2006). The schematic structure of literature reviews in doctoral theses of applied linguistics. *English for Specific Purposes, 25*, 30–35.

Paltridge, B., & Starfield, S. (2007). *Thesis and dissertation writing in a second language: A handbook for supervisors*. Abingdon: Routledge.

Ridley, D. (2012). *The literature review* (2nd ed.). London: Sage.

Rohner, R. (1984) Toward a conception of culture for cross-cultural psychology, *The Journal of Cross-Cultural Psychology*, *15,* 111–138.

Segall, M. H. (1986). Culture and behavior: Psychology in global perspective, *Annual Review of Psychology*, *37*, 523–564.

Swales, J. (1990). *Genre analysis: English in academic and research settings*. New York: Cambridge University Press.

Thomas, D. (2016). *The PhD writing handbook*. London: Palgrave.

Turner, E., & Bitchener, J. (2008). *An approach to teaching the writing of literature reviews*. openrepository.aut.ac.nz/handle/10292/4984

Appendix 1

Kwan's move structure for LR chapters

A move structure for the thematic units in LR chapters (Kwan, 2006, p. 51)

Move 1	**Establishing one part of the territory of one's own research by:**
Strategy A#	surveying the non-research related phenomena or knowledge claims
Strategy B#	claiming centrality
Strategy C	surveying the research related phenomena
Move 2	**Creating a research niche (in response to Move 1) by:**
Strategy A	counter-claiming
Strategy B	gap-indicating
Strategy C	asserting confirmative claims about knowledge or research practices surveyed
Strategy D	asserting the relevancy of the surveyed claims to one's own research
Strategy E	abstracting or synthesizing knowledge claims to establish a theoretical position or a theoretical framework
Move 3 (optional)	**Occupying the research niche by announcing:**
Strategy A	research aims, focuses, research questions or hypotheses*
Strategy B	theoretical positions/theoretical frameworks*
Strategy C	research design/processes*
Strategy D	interpretations of terminology used in the thesis*

* Sub-strategy: justifying or claiming contributions
# Strategy 1B tends to precede Strategy 1A when the two co-occur

Appendix 2

Supervisor survey

1. What in your opinion, is the purpose of a Literature Review?
2. In what ways do you help your supervisees to plan and write their Literature Review chapter?
3. What aspects of producing a Literature Review tend to be more difficult for students?
4. Can you suggest effective ways of organising the Literature Review in your discipline?
5. Please complete the table below with what you consider to be the main characteristics of a successful and a weak Literature Review.

Table 1 A successful LR/A weak LR

A successful LR	A weak LR

Appendix 3

The four assignment rubrics

Unit 1 *Basic issues: Criteria for success, purpose, citation skills*

Choose a paper, chapter or book which you will incorporate in your revue, and draft a short summary, around 200 words. If appropriate, you can include one or two short quotations.

When you send your summary to your tutor, please include the original text, so that she/he can see what you have selected to include in your summary, and how you have modified the original wording.

Unit 2 *Organisation and structure*

Draft an outline of one section of a chapter in which you review literature, then draft a short introduction and a summary. Look for ways in which you can highlight the relevance of the literature to your own work.

Unit 3 *Expressing your voice and writing critically*

1) Write a paragraph summarising and evaluating a source that you would like to cite in a positive way.
2) Write a paragraph summarising and evaluating a source that you would like to cite in a negative way.
3) Write a paragraph summarising and evaluating a source about which you have mixed feelings.

Unit 4 *Synthesis*

Find 4–5 articles on a topic closely related to your PhD. Write a text of 2–4 paragraphs in which you synthesise the content of the articles, organising your text thematically, and avoiding simply providing a series of summaries. At the same time, remember to allow your 'voice' to be 'heard', as we discussed in Unit 3.

Appendix 4

Sample tasks

Focus on language (noticing)
Adopting a stance towards previous research: Critiquing previous studies (Unit 3, Task 8: Extract)

Read the extract below from the Edinburgh PhD thesis by Gourlay (2003), in which she discusses various critiques of a particular research instrument relevant to her work: classroom observation schedules. Underline all the evaluative language she used (we have underlined the first example). Is the criticism here negative, positive, or both? Is Gourlay expressing her own critique, or that of other writers?

2.2.2 Criticisms of systematic observation schedules

Doubts about observation schedules began to be raised in the mid-70s. Bailey (1975) outlines several difficulties inherent in the use of such schedules, concentrating on Moskowitz's (1967) adaptation (and extension) of Flander's system for the language classroom context, *FLint*, (*F*oreign *L*anguage *int*eraction). Bailey criticises the schedule on various counts – that she had experienced problems in judging which category to choose in the time available, that some of the categories were too high-inference, and that in some instances of classroom process, more than one category could be applied, indicating an ambiguity in the categories. The concepts of *direct* and *indirect* also draw criticism for not being clear. The scheme does not allow for recognition of modalities such as sarcasm. She questions the concept of 'predictable' student talk – as the observer would need to be omniscient to know what type of talk is likely to occur as student responses. The 'silence and confusion' category is itself confusing, as the two elements are quite different, and meaningless as it can encompass such a wide range of activities.

Key

Doubts about observation schedules began to be raised in the mid-70s. Bailey (1975) outlines several **difficulties inherent in** the use of such schedules, concentrating on Moskowitz's (1967) adaptation (and extension) of Flander's system for the language classroom context, *FLint*, (*F*oreign *L*anguage *int*eraction). Bailey **criticises** the schedule **on various counts** – that she had experienced **problems** in judging which category to choose in the time available, that some of the categories were **too** high-inference, and that in some instances of classroom process more than one category could be applied, **indicating an ambiguity** in the categories. The concepts of *direct* and *indirect* also **draw criticism** for not being clear. The scheme **does not allow for** recognition of modalities such as sarcasm. She **questions** the concept of 'predictable' student talk – as the observer would need to be omniscient to know what type of talk is likely to occur as student responses. The 'silence and confusion' category is itself **confusing**, as the two elements are quite different, and **meaningless** as it can encompass such a wide range of activities.

Focus on language (production)
Defining terms
(Unit 4, Task 3: Extract)

Look at the extract from Sarah Baeshin's (2016) thesis, part of a section where she offers an extended definition of 'code-switching'. Try and fill in the gaps (there may be more than one possibility). Can you think of other ways (including ways involving punctuation) of indicating when you are giving a definition?

Definition of code-switching (CS)

This section _____ a variety of definitions of CS currently in use among researchers. In bilingual interactions outside the classroom, CS is a common feature. Although many researchers have _____ different perspectives when defining CS, they all agree that it _____ using two or more languages or dialects. Primarily, these definitions _____ the idea of bilingual or multilingual speakers using two or more languages within a single discourse (Milroy & Muysken, 1995). _____ _____, a switch can occur between turns taken, or in utterances in a single turn. Myers-Scotton (2001, p. 23) _____ classic CS ___ 'the alternation between two varieties in the same constituent by speakers who have sufficient proficiency in the two varieties to produce monolingual well-formed utterances in either variety'. This suggests that speakers who switch between two languages have proficient access to grammar knowledge in both languages. Myers-Scotton's classic definition has been criticised as too imprecise (MacSwan, 2014), and a more exact definition was _____ by Jake, Myers-Scotton, and Gross (2002) …

Key

This section introduces a variety of definitions of CS currently in use among researchers. In bilingual interactions outside the classroom, CS is a common feature. Although many researchers have adopted different perspectives when defining CS, they all agree that it involves using two or more languages or dialects. Primarily, these definitions involve the idea of bilingual or multilingual speakers using two or more languages within a single discourse (Milroy & Muysken, 1995). That is, a switch can occur between turns taken, or in utterances in a single turn. Myers-Scotton (2001, p. 23) defined classic CS as 'the alternation between two varieties in the same constituent by speakers who have sufficient proficiency in the two varieties to produce monolingual well-formed utterances in either variety'. This suggests that speakers who switch between two languages have proficient access to grammar knowledge in both languages. Myers-Scotton's classic definition has been criticised as too imprecise (MacSwan, 2014), and a more exact definition was provided by Jake, Myers-Scotton, and Gross (2002) …

Brief writing tasks
(Unit 4, Task 4)

Below are some definitions from the literature on the subject of 'culture'; they are all direct quotations. Write a paragraph in which you synthesise them into a single paragraph, including all the ideas covered while avoiding repetition, and making clear which aspects of the definition you would adopt yourself, or whether you prefer to provide a new definition.

a. *Culture is 'the totality of … learned meanings maintained by a human population, or by identifiable segments of a population, and transmitted from one generation to another'*
   Source: pages 119–120 in an article called 'Toward a conception of culture for cross-cultural psychology', written by R. Rohner in 1984; in the Journal of Cross-Cultural Psychology, volume 15 pages 111 to 138.

b. *'Culture consists in patterned ways of thinking, feeling and reacting, acquired and transmitted mainly by symbols, constituting the distinctive achievements of human groups, including their embodiments in artifacts …'*
   Source: page 86 of a paper by C. Kluckhohn called 'The study of culture' in a collection called 'The Policy Sciences', edited by D. Lerner and H. D. Lasswell, published in Stanford, California by Stanford University Press in 1951.

c. *'Every person is encultured into a particular culture, learning the "right way" of doing things'*
   Source: page 1 in a book called 'International Business' written by M. R. Czinkota and I. A. Ronkainen in 1988; published by Oxford University Press in New York.

d. *'… the collective programming of the mind that distinguishes the members of one group or category of people from another'.*
   Source: page 9 in the second edition of a book called 'Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations Across Nations' written by G. Hofstede, published in Thousand Oaks, California in 2001 by Sage Publications.

e. *'Many … think of culture as composed of numerous separable…factors, including subsistence patterns, social and political institutions; languages; rules governing interpersonal relations; divisions of labor by sex, age, or ethnicity; population density; dwelling styles; and more…'*
   Source: p. 526 of an article written by M. H. Segall called 'Culture and Behavior: Psychology in Global Perspective', in the journal called Annual Review of Psychology, 1986.

Acknowledgement: this task is adapted from Bitchener, J. and Turner, E. *An Approach to Teaching the Writing of Literature Reviews* (2008) in zeitschrift-schreiben.eu. Available at http://aut.researchgateway.ac.nz/handle/10292/4984 Accessed 30/11/16.