

Qualitative Research SBPD7002
Doctorate in Business Administration

Assignment 2

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*“we do not learn from experience...we learn from reflecting on
experience”*
(Dewey, 1933 p.78).

*“doing qualitative research is by nature a reflective and recursive
process”*
(Ely et al, 1991.p.179)

Abstract

The report's author [referred to as the reviewer] was invited to carry out an anonymous peer review (PR) of a doctoral candidate author's (DCA) critical reflection report on personal contributions made during a group Qualitative Research (QualR) project(s).

To mitigate personal bias in assessing the quality of the report, the reviewer utilises UWTSD marking criteria to frame analysis in lieu of publication guidelines specifically focused on 'reflections' on a QualR project, given it is the criteria the DCA's report is officially scrutinised. In addition to scholarly publications on QualR rigour expectations, Moon's (2004) detailed guidance on levels of reflective writing alongside Morrow's (2009) different forms and domains of reflection inform the reviewer's contextualised assessment of the reflective approach adopted. Toulmin's (1958) model of argument is referred to facilitate analysis of quality of argumentation.

Overall, the submission reads as a *"descriptive account with some self-reflection"* with *"some questions raised but not answered"* (Moon, 2014 p215). Whilst there is evidence of an integration of literature properly referenced, it is mostly used to underpin theoretical descriptions, or emphasise material submitted within the QualR module project(s), and more generally raises awareness of limitations rather than implications of decisions made or to trigger ideas for change in future research endeavours. Given the reviewer recognises that they bring their own assumptions/beliefs and values to the interpretation/analysis of the DCA report, suggestions for action are tendered rather than directed. Support resources, as purely examples of tools to support deeper reflection are appended (1-3).

Acronyms

CR: Critical Reflection

CT: Critical Thinking

DCA: Doctoral Candidate Author

PR: Peer Review

QualR: Qualitative Research

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Appendix 2: Indicators of critical reflection (Source: Morrow, 2009, p22)

Appendix 3: Questions to Support Reflective Writing (Source: Moon 2004, p.210)

1. Introduction

1.1 Terms of Reference

This report applies the approach of an academic peer review (PR) to a doctoral candidate's reflective report focused upon contributions within a Qualitative Research (QualR) context. The author, referred to as the 'reviewer' adopts the stance of Topping (1998, p.249): PR is "*an arrangement in which individuals consider the amount, level, value, worth, quality, or success of the product/outcomes of learning of peers of similar status*". The value being that PR "*is an authentic, real-world approach to assessing learning and achievement that contributes to development of these attributes by fostering [their] capabilities for critical thinking and self-evaluation*" (Boase-Jelinek, 2013, p.119). Limitations in judging 'reflection' as a paper seeking publication is declared, due to its 'personalised' context; although assessing the work as rigorous and embodying quality argumentation is considered a fair aim.

1.2 PR scope

The reviewer aims to constructively critique the reflective approach adopted by a Doctoral Candidate Author (DCA) in a QualR context, which infers a review of knowledge, understanding and application of critical thinking (CT) (Dewey, 1933). Capacity to make qualitative judgements is deemed fundamental given real-world researchers are "*exposed to complex information and events in personal, professional and global contexts*" (Nicol, 2011 [online]). Adopted by the reviewer is the

perspective PR provides support, plays devil's advocate, challenges assumptions, and probes methodology, methods and interpretations (Lincoln & Guba, 1985), and is of reciprocal value to the reviewer (Sadler, 2012) aiding the development of feedback skills whilst accessing new idea/approaches (Nicol et al., 2014). It is also recognised exposing one's work for examination requires courage and open-mindedness, [and]...a readiness to consider and act upon criticism levied (Dewey 1933).

1.3 CR and strong argumentation

No set CR criteria exists but there is consensus that varying depth exists, with the highest level demanding "*a change to deep-seated (...) unconscious beliefs [that can] lead to new belief structures*" (Kember et. al., 2008 p370). Embedded in the process are expectations of deep levels of CT and analysis. Consequently, adherence to Toulmin's (1958) argument model disciplines claims to be substantiated, supporting objective academic- writing. In studies led by Tal & Hochberg (2002) and Iordanou & Constantinou (2015) employ of Toulmin supported reflective thinking, encouraging students to present meta-cognitive skills.

2. Methodology

2.1 Approach adopted within the PR

The PR process itself is prone to subjectivity and bias (Tomkins et al. 2017; Rennie & Flanagan 2018) e.g. social or affiliation bias (Walker, 2015). Relationships between individuals involved can impact outcomes, and opinions can be conditioned on beliefs about what others value (Moussaïd et al., 2013). Consequently the reviewer consulted peer-reviewed QualR publications for standard expectations, to develop impartiality in the process (Lee et al., 2013); however lack of published ‘reflections’ specifically in a QualR context became evident. UWTSD common assessment criteria (UWTSD, 2017) informs the PR feedback criteria in lieu of reflection publication guidelines, given it is known by the reviewer as the scheme by which the DCA’s report is scrutinised. Hudson et al. (2017, p1312) highlight “*standards cannot be completely codified, assessment criteria require interpretation*” so it’s accepted by the reviewer that “*not all aspects of quality can be communicated through explicit criteria; some will remain tacit and embodied*” (Tai et al. 2017, [online]). The reviewer further acknowledges own bias: a preference for structured reflective processes e.g. Moon’s guidance on reflective writing (Moon, 2004, 6006) and Morrow’s interpretation of varying CR forms/domains (Morrow, 2009)(figure 1).

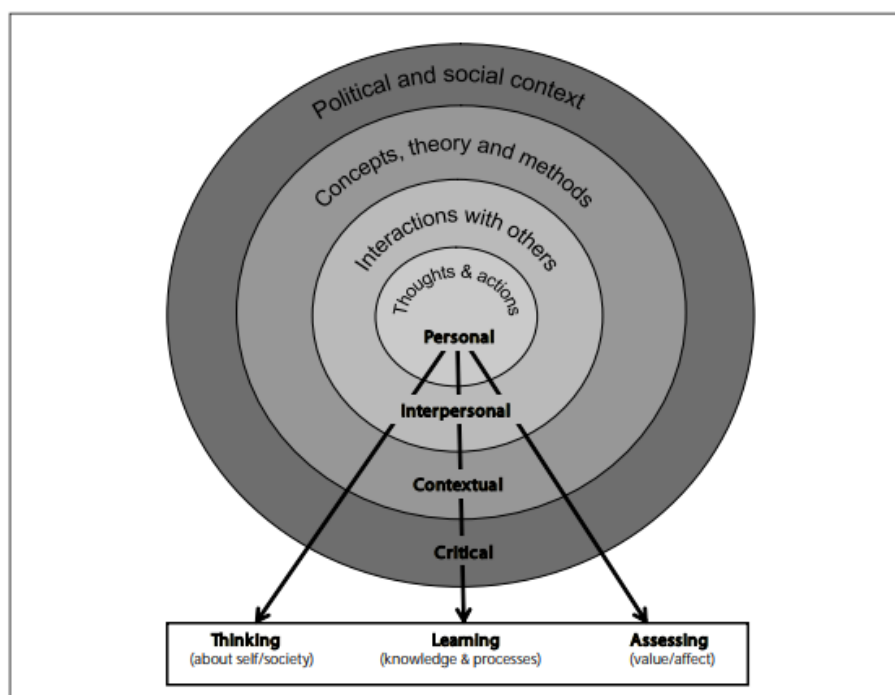


Figure 1: Forms & domains of CR (Morrow, 2009)

2.2 PR feedback structure

Section 3 presents feedback commentary mirroring the DCA's report structure and flow. Section 4 summarises with more general feedback embedding UWTSD marking criteria (UWTSD, 2017), subsuming typical PR themes. Conclusions/suggestions for future practice are tendered in section 5. Specific content emphasised/targeted with the DCA report is signposted in brackets [DCA, p9] for cross-referencing.

3. DCA's report critique

3.1 Introduction

The reviewer's perceives the DCA's report aim design to include a general critique of methodological approach adopted distracts from a more in-depth personal reflexive emphasis on personal judgements made in a QualR context. This results in the DCA overly investing in theoretical research approach/orientation descriptions (DCA, p1-2), triggering an imbalance of focus on fellow researcher(s) actions/decisions. This is potentially at the cost of in-depth personal reflection i.e. *recording of perceptions, judgements, reactions and behaviours in relation to an issue/practice,... making explicit any ethical, political or social issues encountered,...examining interpersonal interactions*" (Morrow, 2009, p18). Whilst reflection does not preclude consideration of others actions e.g. Griffiths et al. (2018, p913) declare "*the importance of being able to question assumption made by oneself and others, according to the context*", this should not deflect from deeper self-CR with impact on own approach or implications on the research outcomes/future actions considered.

An introduction which clarified the project(s) scope(s) would have improved clarity on range of challenge confronted. Two presentations, a proposal, and a variance of subject-matter materialises as the report develops, suggesting, not confirming, a breadth of tasks with varying participants. Improved project(s) clarity would have provided stronger implication of context, at least clarifying the territory (Kahn et al., 2006), important in extracting meaning from specific experiences (Costac & Kallick, 2008).

3.2 Research Philosophy (RP)

The DCA raises issue with fellow researcher's employ of the 'Research Onion' (Saunders et al., 2015), i.e. introduced not used to justify/contextualise decisions [DCA, p3]. The DCA falls victim to a similar judgement by recounting RP theory as opposed to deeper 'contextual reflection' or justifying their RP alignment (Morrow, 2009), also avoiding where criticism is dealt to consider how consensus on a RP may have been achieved differently. The reflexivity sub-section also highlights omission of an ontological position [DCA, p5], claiming it potentially leads to "*researcher bias*", "*reduced research credibility*" and "*hinders the approval of the research project*" (DCA, p5). Instead *constructionism*" is declared the preferred position. All claims are not fully explored/supported and can be rebutted. Given some researchers, specifically applied/pragmatic can be annoyed by epistemological and ontological argumentation, this is a mono-perspective view. Whilst "*philosophical and theoretical traditions have greatly influenced the debate about the value and legitimacy of qualitative inquiry [...] it is not necessary to swear vows of allegiance to [them]*" (Patton, 2002, p136). Regarding researcher bias, it is recognised "*even when preconceptions/biases are acknowledged they are not easily abandoned*" (Ahern, 1999, p.409) or systematically eliminated. Bias potential influence on a study's conclusion (Gerhard, 2008) must be considered; not to do so could comprise study reliability, and potentially distort the truth. Whilst the nature of QualR fundamentally requires "*personal rather than detached engagement in the context*" by the researcher (Rajendran, 2001, p3), "*explicating the simultaneous and multifaceted processes of inquiry i.e. the conscious and tacit learning-thinking-researching-feeling-interpreting-knowing-writing*" (Meloy, 2008, p.xiii) can support better QualR

research. Furthermore whilst ‘investigator triangulation’ (IT) [DCA, p7] is offered as missed opportunity for collaborative discussion/challenge of the presentation’s RP, the reviewer recognises whilst multiple researcher input can strength study design *“not for the purpose of consensus...but to supplement and contest statements, validation by consensus is seldom adequate”* (Malterud, 2011, p.484.) in QualR.

3.3 Communication & Data Capture

Personal contribution to set up a skype group is declared, with benefits noted [DCA, p8] but no reflection occurs on how this medium served/complicated/impacted upon the research process/outcomes. Similarly ‘minutes’ authored [ibid; appendix2] is offered as evidence. Whilst these facilitate the DCA’s acknowledgement of ‘individual bias’ potential, they open unfulfilled expectations for deeper-reflective-based discussion. Given ‘other researchers’ are clearly involved, and communication ‘headlines’ this section, potentially a dimension of interpersonal reflectivity (Morrow, 2009) (e.g. group dynamics/team-working influence on the DCA’s decision-making and vice-versa) should be explored. Discussion of emotions working in, and documenting ideas and actions of a group, with consideration of implications for the research design and outputs are absent. Questions arise as to whether the approach taken to minute-taking (sharing/confirming meeting outcomes) potentially supports/thwarts the groups’ progression. Approaches to mitigate individual bias mentioned [DCA, p8] are not discussed.

3.4 Focus Groups (FGs)

The DCA uses FG proposal content as evidence of project contribution [DCA, p9]; however revisiting/documenting this detail replaces value-adding discussion of method choice and content assembly e.g. explanation of disciplinary-based ideas or frameworks that informed the way interpretations of FGs as a valid approach to a specific research context were collated (Morrow, 2009). Whilst the DCA admits an ‘assumption’ of sufficiency of information due to lack of challenge [DCA, p10] and omission of potential implementation disadvantages [DCA, p11], this does not acknowledge researcher responsibility to challenge one’s method selection process, in order to demonstrate a critical approach to a research problem. A key researcher objective/responsibility is to confront [address not just list] assumptions (Bloomberg & Volpe, 2008; Brutus et al., 2012). This seems important given the complex rich environment [applied collaborative research] in which the DCA’s QualR project(s) takes place. Not receiving feedback on decisions made is an inadequate response/replacement for “*constructing higher-order questions to guide learning, reflection on consequences and implications of actions, and the monitoring and modification of personal cognitive activities* (Grabinger & Dunlap, 1995, p15).

3.5 Survey Design/Distribution

Pilot study commentary [DCA, p12] is focused upon recounting steps undertaken. In the ethical reflections sub-section, whilst awareness of potential ‘*rebuttals on [its] deployment*’ is declared [DCA, p.13] e.g. non-submittal of an Ethics Approval Form,

details are not explored. Nor is it clear whether this was directly attributable to the DCA or a fellow contributor.

3.6. Data Analysis

Employ of an '*analytical approach*' leading to an '*unbiased view of the research*' is claimed [DCA, p14], as is use of a '*ground theory approach*' [DCA, p15], but no evidence/discussion supports this. Claims '*triangulation*' was adopted and a '*thorough data cleaning approach*' implemented [ibid.] is not evidenced/backed. Whilst lack of discussion does not disproves claims, limited commentary underserves as fruitful personal contribution reflection. Opportunities to unpack what a more '*vigorous deployment of the questionnaire*' [DCA, p16] are untapped.

4. General Assessment Feedback

4.1 Quality

Points of limitation of approaches/decisions lead the DCA to raise questions. Beyond a descriptive account, this demonstrates increasing knowledge and understanding of QualR. However lack of response to a number of issues highlighted suggests limited deeper analysis (Moon, 2004). The dominant output of the report is perceived [by the reviewer] to be a more general critique of a selection of decisions made across group projects rather than more in-depth capture of CR reflections on one's own actions, reflection-on-action, to inform future reflection-in-action (Schön, 1983).

4.2 Research-informed Literature

There is an inclusion of relevant and credible scholarly material that is accessible in journals to support theoretical descriptions and discussion, but further supplementing with materials to assist in questioning/challenging approaches may have facilitated a deeper critical reflective endeavour.

4.3 Knowledge and Understanding of Subject

Report content supported by evidence confirms contribution and growing awareness of potential limiting implications of researcher actions e.g. reduced credibility/rigour where bias can be identified or design approaches left unchallenged. There is however scope for the DCA to experiment with, and build upon reflective techniques to achieve improved verification of establishing reliability and validity of QualR (Morse et al., 2002); whether that be questioning of assumptions, methods and beliefs through employ of a list of Socratic questions (Van-Seggelen et al. 2017) or use of a CR

framework. A development goal being a move from post-hoc evaluation to continuous flow of reflection-in-action (Schon, 1983), to fine-tune mastery of QualR skills.

4.4 Analysis

There is evidence where deeper reflection on personal assumptions, decision-making and research design has been sacrificed for breadth of coverage including focus on judging fellow researchers contributions. More attention to what informed decisions to apply certain concepts/approaches to achieve project aims may have supported more productive analytical reflection. Whilst the “what” and occasionally the “why” with a generalised implication e.g. increased bias/reduced credibility is documented, analytical reflections that weigh ‘for and against’ positions are not adopted for full argumentation (Toulmin, 1958). Many statements appear to defend rather than challenge contributions e.g. production of content to support the adoption of FGs in the healthcare study. There is limited consideration of the implications of decisions/actions on both the researcher(s) and recipients of the research project(s), which may have supported more persuasive report conclusions, specifically important for real-world research which informs problem resolution (Robson & McCartan, 2016).

4.5 Practical Application and deployment

Implications on decision-making are lightly commented upon e.g. potential for misrepresentation of information to an audience [DCA, pg3], reduced rigour, and hindered credibility of findings [e.g. DCA, p6, 11, 13, 14, 15]. Actual impact/response of recipients of the research requires consideration.

Whilst acknowledging the report is limited to a sample of contributions, it is not clear whether the DCA links depth of reflection and QualR skill refinement e.g. “*good qualitative questions are usually developed or refined in all stages of a reflexive journey*” (Agee, 2009 p43). The DCA does not explore implications of any aforementioned issues identified in the reflection contributing to degree of rigour, on the quality of actionable insights to drive change, enhance results or solve problems.

4.6 Skills for Professional Practice

The report is presented professionally, and sources accurately documented. The structure, clarity, and organization of the paper could benefit from a clearer introductory scope, confirming context. Potentially more use of advanced organizers (Hantla, 2018) would assist in the overall thread/flow of the report. A summary of final reflections, followed by implications for QualR practice, and future actions would assist in consolidating reflective output.

CR can support transformative learning, engaging both reason and emotion (Taylor, 2001) but absence of emotion i.e. coverage of attempt to work through contradictory feelings, reactions and undersanding (McDonald, 2011) should be reconsidered for future reflections. QualR, according to Attia & Edge (2015, p34) “*demand an empathic ability to relate to social and psychological realities other than one’s own..., [an acknowledgment] that the researcher always has a particular standpoint, and [requires] openness that is prepared to risk having that standpoint changed*”.

5. Summary

Overall QualR rigour and approach to scholarly argumentation could be augmented. Use of a theoretical framework/model for a more objective systematic/methodical reflection is suggested e.g. the rubric developed by Styne et al. (2018)[appendix 1] or Morrow (2009)[appendix 2]. To upgrade reflection depth could be supported by Moon's (2004) questioning [appendix 3] or reference to a CT frameworks. Socratic questioning techniques may discipline collation of sufficient evidence to support claims made.

Given the context of the DCA reflection is QualR in a real-world context, the reviewer reminds of importance to effectively persuade audiences [clients/stakeholders/funders/editors] of the trustworthiness of findings (Robson, 2002). Deep reflection can support the development of rigour in QualR projects whether that be the identification of potential bias or triggers to strengthen trustworthiness e.g. refining methods, enhancing research design explanations or strengthened arguments (Shenton, 2004) in order to incorporate "*correct operational measures for the concepts being studied*" (Yin, 2014, p.46). Given the reference to group-working it is highlighted learning processes can also be achieved through discussion and collaborative learning (Sargeant, 2012).

6. Suggestions for Action for DCA

- Consider frameworks/models to structure deeper reflection inclusive of CR/CT/argument augmentation support
- Build on implications of own/fellow researcher decisions to inform future research design/practice
- Recognise and discuss level of emotional influence within the research process
- Make wider reference/consideration to alternative viewpoints
- Incorporate reflexivity in group-work exercises
- In addition to evaluations on rigour, acknowledge impact of research design on outcomes i.e. implications for policy/practice given the integrity of the QualR research outputs in real-world contexts will impact the ability to produce actionable insights to drive change, enhance an organisation's results or solve problems.

Finally, the reviewer aspires to present content of constructive value, and confirms appreciation for the opportunity to engage in the PR exercise.

References

- Agee, J. (2009) Developing qualitative research questions: a reflective process, *International Journal of Qualitative Studies in Education*, **22**(4) pp. 431-447
- Ahern, K.J. (1999) Ten tips for reflective bracketing, *Qualitative Health Research*, **9**(3) pp.407-411
- Attia, M. & Edge, J. (2017) Be(com)ing a reflexive researcher: a developmental approach to research methodology, *Open Review of Educational Research*, **4**(1) pp. 33-45 doi: [10.1080/23265507.2017.1300068](https://doi.org/10.1080/23265507.2017.1300068)
- Barbour, R.S. (2001) Checklists for improving rigour in qualitative research: a case of the tail wagging the dog? *BMJ : British Medical Journal*, **322**(7294) pp.1115-1117
- Berndt, M., Strijbos, J.W. & Fischer, F. (2018) Effects of written peer-feedback content and sender's competence on perceptions, performance, and mindful cognitive processing. *European Journal of Psychology of Education*, **33**(1), pp. 31-49
- Bloomberg, L.D. & Volpe, M. (2008) *Completing Your Qualitative Dissertation: A Road Map From Beginning to End*, 2nd ed., Sage Publications: USA
- Boase-Jelinek, D., Parker, J. & Herrington, J. (2013) Student reflection and learning through peer reviews, *Issues in Educational Research*, **23**(2), 2013: Special Issue 119
- JMCP (Journal of Managed Care & Specialty Pharmacy)(n.d.) Peer Review Checklist and Guidelines [online]. Available at: http://www.amcp.org/JMCP_Docs/Peer_Review/8779/1033.html [Retrieved 1st May 2018]
- Boud, D.& Soler, R. (2016) Sustainable assessment revisited, *Assessment & Evaluation in Higher Education*, **41**(3), pp. 400–413
<https://doi.org/10.1080/02602938.2015.1018133>

Brooks, V. (2012) Marking as judgment, *Research Papers in Education*, 27(1) pp. 63–80 <https://doi.org/10.1080/02671520903331008>

Brutus, S., Aguinis, H. & Wassmer, U. (2012) Self-Reported Limitations and Future Directions in Scholarly Reports: Analysis and Recommendations, *Journal of Management*, 39 (1), pp. 48-75

Costa, A.L. & Kallick, B. (2008) *Learning and Leading with Habits of Mind: 16 Essential Characteristics for Success*, ACSD: Virginia, USA

Creswell, J.W. & Miller, D.L. (2010) Determining Validity in Qualitative Inquiry, *Theory Into Practice*, 39 (3) pp. 124-130, doi: [10.1207/s15430421tip3903_2](https://doi.org/10.1207/s15430421tip3903_2)

Dewey J. (1933) *How We Think*. Boston, D. C. Heath and Co.:M.A.

Di Stefano, G., Gino, F., Pisano, G. P. & Staats, B. R. (2014) Learning by thinking: How reflection aids performance, *SSRN Electronic Journal*, March 25, 2014 [online]. Available at: <http://www.sc.edu/usconnect/doc/Learning%20by%20Thinking,%20How%20Reflection%20Aids%20Performance.pdf> [Accessed 1st May 2018]

Ely, M, Anzul, M., Friedman, T., Garner, D. & McCormack-Steinmetz, A. (1991) *Doing Qualitative Research: Circles within Circles*, Falmer: London

Fook, J. (2004) Critical Reflection and Transformative Possibilities. In L. Davies and P. Leonard (eds), *Social Work in a Corporate Era: Practices of power and resistance*.(pp. 16-30), Ashgate

Gerhard, T. (2008) Bias: Considerations for research practice, *Am. J. Health. Syst. Pharm.* 2008, 65 pp. 2159–2168

Grabinger, R.S. & Dunlap, J.C. (1995) Rich environments for active learning: a definition, *ALT-J*, 3(2) pp. 5-34 doi: [10.1080/0968776950030202](https://doi.org/10.1080/0968776950030202)

Griffiths, D.A, Inman, M., Rojas, H. & Williams, K. (2018) Transitioning student identity and sense of place: future possibilities for assessment and development of student employability skills, *Studies in Higher Education*, **43** (5) pp. 891-913
doi: 10.1080/03075079.2018.1439719

Guion, L.A., Diehl, D.C. & McDonald, D. (2011) Triangulation: Establishing the Validity of Qualitative Studies, University of Florida [online]. Available at: http://www.ie.ufrj.br/intranet/ie/userintranet/hpp/arquivos/texto_7_-_aulas_6_e_7.pdf
[Retrieved 4th May 2018]

Hantler, B. (2018) When It's Best to Be Explicit: Using Advance Organizers to Structure Your Argument [online]. Available at: <https://www.aje.com/en/arc/when-its-best-be-explicit-using-advance-organizers-structure-your/> [Retrieved 5th May 2018]

Hogan, K., Nastasi, B. K., & Pressley, M. (2000) Discourse patterns and collaborative scientific reasoning in peer and teacher-guided discussions, *Cognition and Instruction*, **17** (4), pp. 379-432.

Hoppin FG., Jr. (2002) How I Review an Original Scientific Article, *American Journal of Respiratory and Critical Care Medicine*, **166**(8) pp. 1019-1023

Hudson, J., Bloxham, S., den Outer, B. & Price, M. (2017) Conceptual acrobatics: talking about assessment standards in the transparency era, *Studies in Higher Education*, **42**(7) pp. 1309–1323 <https://doi.org/10.1080/03075079.2015.1092130>.

Iordanou, K. & Constantinou, C.P. (2015) Supporting Use of Evidence in Argumentation Through Practice in Argumentation and Reflection in the Context of SOCRATES Learning Environment, *Science Education*, **99** (2), March pp. 282-311

Kelly, J., Sadeghieh, T. & Adeli, K. (2014) Peer Review in Scientific Publications: Benefits, Critiques, & A Survival Guide, *Electronic Journal of the International Federation of Clinical Chemistry and Laboratory Medicine*, **25** (3), pp.227–243

Kember, D., McKay, J., Sinclair, K., & Wong, F. K. Y. (2008) A four-category scheme for coding and assessing the level of reflection in written work, *Assessment and Evaluation in Higher Education*, 33, pp. 369–379.

Khan, J. A. (2008) *Research Methodology*, APH Publishing: New Dehli

Kahn, P., Young, R., Grace, S., Pilkington, R., Rush, L., Tomkinson, B., Willis, I., Evans, E., Moon, J. and Wareham, T. (2006) *The role and effectiveness of reflective practice in programmes for new academic staff: A grounded practitioner review of the research literature*, Manchester: University of Manchester. (Higher Education Academy funded project)

Joughin, G., Dawson, P. & Boud, D. (2017) Improving assessment tasks through addressing our unconscious limits to change, *Assessment & Evaluation in Higher Education*, 42(8) pp.1221–1232 doi. org/10.1080/02602938.2016.1257689.

Langfeldt, I. & Kyvik, S. (2011) Researchers as evaluators: tasks, tensions and politics, *Higher Education*, 62(2), pp. 199-212.

Lee, C.J, Sugimoto, C.R., Zhang, G. & Cronin, B. (2013) Bias in Peer Review, *Advances In Information Science, Journal Of The American Society For Information Science And Technology*, January 2013 pp. 1-17

Lincoln, Y.S & Guba, E.G. (1984) *Naturalistic Inquiry*, Sage Publications: Beverly Hills, California

Lomax, P. (1995) Action Research for Professional Practice, *Journal of In-Service Education*, 21 (1) pp. 49-57 doi: 10.1080/0305763950210105

Malterud, K. (2001) Qualitative research: Standards, challenges, and guidelines, *The Lancet*, 358(9280), pp. 483-8

Mangelsdorf, K. (1992) Peer reviews in the ESL composition classroom: what do the students think? *English Language Teaching (ELT) Journal*, 46(3), pp. 274 283

McConlogue, T. (2012) But is it fair? Developing students' understanding of grading complex work through peer assessment, *Assessment & Evaluation in Higher Education*, **37**(1) pp. 113-123

McDonald, L. (2011) Critical Reflective Writing in Social Work, he Dalhousie Writing Centre [online]. Available at:
<https://www.slideshare.net/dalwritingcentre/critical-reflective-writing> [Retrieved 2nd May 2018]

McPhearson, R. (2014) Critique on practice and critical reflection [online]. Available at: <https://prezi.com/do7t7kmpgqg/critique-on-practice-critical-reflection/> [Retrieved 4th May 2018]

Meloy, J.M. (2008), *Writing the Qualitative Dissertation: Understanding by Doing*, 2nd edition, Lawrence Erlbaum Associates, Inc: Mahwah

Morrow, E. (2009) Teaching critical reflection in healthcare professional education, School of Nursing & Midwifery, King's College London Submitted: August 2009 [online]. Available at:
<https://pdfs.semanticscholar.org/11e1/e2d2ba2a82c381de56c0f36154e7d59e3955.pdf> [Retrieved 4th May 2018]

Moon, J. A. (2004) *A Handbook of Reflective and Experiential Learning*, Routledge Falmer: London

Moon, J.A. (2006) *Learning Journals*, 2nd edition, Routledge Falmer: Oxon.

Morse, J.M., Barrett, M., Mayan, M, Olson, K. & Spiers, J. (2002) Verification Strategies for Establishing Reliability and Validity in Qualitative Research, *International Journal of Qualitative Methods*, **1** (2) pp. 13-22
<https://doi.org/10.1177/160940690200100202>

Moussaïd, M., Kämmer, J.E., Analytis, P.P., & Neth, H. (2013) Social Influence and the Collective Dynamics of Opinion Formation, *PLOS*, **8**(11): e78433.

<https://doi.org/10.1371/journal.pone.0078433>

Nicholas, K.A. & Gordon, W. (2011) A Quick Guide to Writing a Solid Peer Review, *Bulletin of the Ecological Society of America*, **92**(4) October pp 376-382

Nicol, D. (2011) Developing students' ability to construct feedback, Graduates for the 21st Century: Integrating the Enhancement Themes [online]. Available at:

<http://www.enhancementthemes.ac.uk/docs/publications/developing-students-ability-to-construct-feedback.pdf?sfvrsn=30> [Retrieved 1st May 2018]

Nicol, D., Thomson, A. & Breslin, C. (2014) Rethinking feedback practices in higher education: a peer review perspective, *Assessment & Evaluation in Higher Education*, **39** (1) pp. 102-121 doi: 10.1080/02602938.2013.795518

Ortlipp, M. (2008). Keeping and Using Reflective Journals in the Qualitative Research Process, *The Qualitative Report*, **13**(4), pp. 695-705

Patton, M.Q. (2002) *Qualitative Research & Evaluation Methods*, 3rd ed., Sage Publishing: USA

Rajendran, N.S. (2001) Dealing with biases in Qualitative Research: A balancing act for researchers [online]. Available at:

<http://nsrajendran.tripod.com/Papers/Qualconfe2001.pdf> [Retrieved 10th May 2018]

Rennie, D. & Flanagan, A. (2018) Three Decades of Peer Review Congresses, *JAMA*, **319**(4) pp. 350–353. doi:10.1001/jama.2017.20606

Robson, C. (2002) *Real world research: a resource for social scientists and practitioner researchers*, 2nd ed., Blackwell: Oxford

Robson, C. & McCartan, K. (2016) *Real World Research*, 4th ed., John Wiley & Sons: London

Sadler, D. R. (2010) Beyond feedback: Developing student capability in complex appraisal, *Assessment & Evaluation in Higher Education*, **35**(5), pp.535–550

Sargeant, S. (2012) ‘I Don’t Get it’: a critical reflection on conceptual and practical challenges in teaching qualitative methods, *Psychology Learning and Teaching*, **11** (1) pp. 39-45

Saunders, M., Lewis, P. & Thornhill, A. (2015) *Research Methods for Business Students*, 7th ed. Pearson Publishing

Schön, D. (1983) *The Reflective Practitioner: How professionals think in action*, Temple Smith: London

Shenton, A.K. (2004), Strategies for ensuring trustworthiness in qualitative research projects, *Education for Information*, **22**(2) pp. 63–75

Smith, R. (2006) Peer review: a flawed process at the heart of science and journals, *Journal of the Royal Society of Medicine*, **99**(4) pp178-182

Tai, J., Ajjawi, R., Boud, D., Dawson, P. & Panadero, E. (2017) Developing evaluative judgement: enabling students to make decisions about the quality of work, *High Education*, Published online 16 December 2017
<https://doi.org/10.1007/s10734-017-0220-3> [online]. Available at:
<https://link.springer.com/content/pdf/10.1007%2Fs10734-017-0220-3.pdf>
[Retrieved 1st May 2018]

Tal, R.T. & Hochberg, N. (2002) Assessing argumentation and reflective thinking of students participating in WISE Project in Israel, Technion, Israel Institute of Technology, Haifa, Paper presented at the *Learning Communities and Assessment Cultures Conference*, EARLI Special Interest Group on Assessment and Evaluation, University of Northumbria, 28-30 August 2002 [online]. Available at:
<http://www.leeds.ac.uk/educol/documents/00002254.htm> [Retrieved 1st May 2018]

Tomkins, A., Zhang, M., & Heavlin, W.D. (2017) Single- vs. double-blind reviewing at WSDM 2017, *Proceedings of the National Academy of Sciences* Nov 2017, **114** (48) pp. 12708-12713; DOI:10.1073/pnas.1707323114

Topping, K. (1998) Peer assessment between students in colleges and universities, *Review of Educational Research*, **68**(3) pp. 249 – 276

Toulmin, S. (1958) *The uses of an Argument*, Cambridge University Press: Cambridge

University of Kentucky (2013) Peer Review Guidelines [online]. Available at: <http://www.uky.edu/~eushe2/614/Guidelines%20for%20Peer%20Review.pdf> [Retrieved 1st May 2018]

UWTSD (2017) University Regulations Postgraduate Student Guide (Taught Degrees) [online]. Available at: https://www.uwtsd.ac.uk/media/uwtsd-website/content-assets/documents/academic-office/regulations-student-guides/University_Regulations_Postgraduate_Taught_Student_Guide_2017-18.pdf [Retrieved 3rd May 2018]

Vance, D. E., Talley, M., Azuero, A., Pearce, P.F. & Christian, B.J. (2013) Conducting an article critique for a quantitative research study: perspectives for doctoral students and other novice readers, *Nursing: Research and Reviews*, Published online April 2013 [online]. Available at: <https://pdfs.semanticscholar.org/b46f/b35f275f6c265ec7792b207c4a94d0983dde.pdf> [Retrieved 1st May 2018]

Van Seggelen–Damen, I.C.M., Hezewijk, R.M., Helsdingen, A.S. & Wopereis, I.G.J.H. (2017) Reflection: A Socratic Approach, *Theory & Psychology* **27** (6) pp. 793–814

Walker, R., Barros, B., Conejo, R., Neumann, K. & Telefont, M. (2015). Personal Attributes of Authors and Reviewers, Social Bias and the Outcomes of Peer Review: A Case Study, *F1000Research* 4 (2015) p,21. *PMC*. Web. 8 May 2018.

Wessa, P. & De Rycker, A. (2010) Reviewing peer reviews - A rule-based approach,. Proceedings of 5th International Conference on e-Learning (pp. 408-418) [online]. Available at: <https://www.wessa.net/download/icel10.pdf> [Retrieved 1st May 2018]

Yin, R.K. (2014) *Case Study Research Design and Methods*, 5th ed., Thousand Oaks, CA

Appendix 1: Reflection-on-action rubric (Source: Stynes et al., 2018)

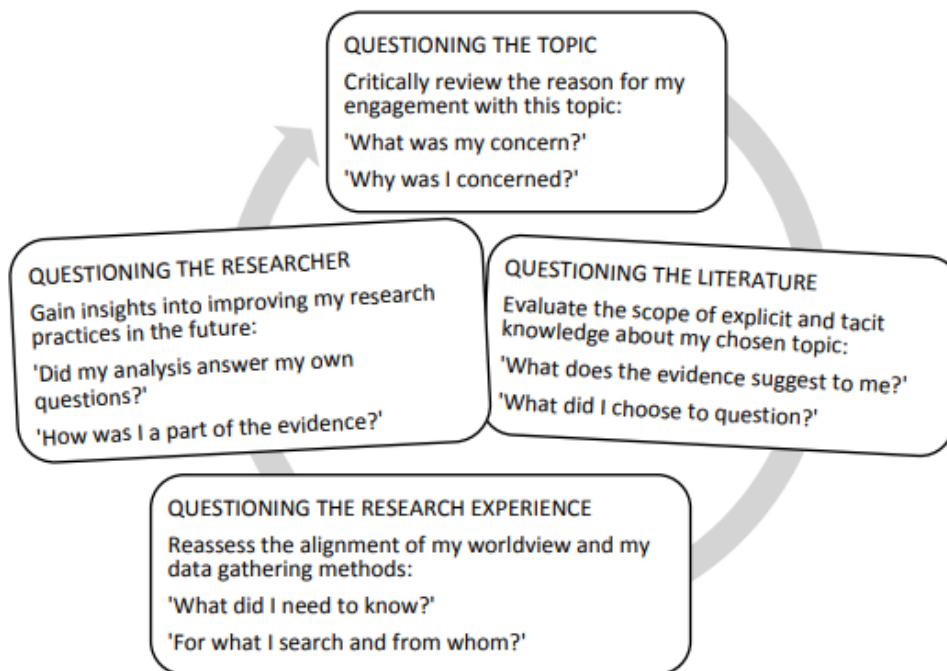


Figure 1: Reflection-on-action rubric

Appendix 2: Indicators of critical reflection (Source: Morrow, 2009, p22)

Domain 1: Self-critical (reflecting on your own thoughts and actions) Key considerations could include: • Why are you interested in a particular issue or topic? • What questions seem important to you? • What informs your views? • What aspects of your background are you drawing on? • What personal experience do you have?	Domain 2: Interpersonal (reflecting on interactions with others) Key considerations could include: • What disciplinary-based ideas and frameworks inform your interpretations? • What aspects of your disciplinary background lead you to dwell on certain aspects of an issue or problem and not others? • Whose perspectives might be missing or overlooked?
Domain 3: Contextual (reflecting on concepts theories or methods used) Key considerations could include: • What insights were generated, or do you hope to generate, by using a particular approach? • On what basis do/will these insights contribute to knowledge or practice? • What different insights may be/have been made if a different approach or perspective had been taken?	Domain 4: Critical (reflecting on political, ethical and social context) Key considerations could include: • What is the political context in this situation, what are the contentious issues? • Is there a political agenda at stake: what might the outcome be? • Who might gain because of what has been done or not done: who might lose out?

Appendix 3: Questions to Support Reflective Writing (Source: Moon 2004, p.210)

It can be useful to prompt the description of the subject matter of reflection in terms of a question such as:

- ♦ What is the issue / event / topic / plan / project / task / period of time etc that is to be the subject matter of the reflection?

Questions to facilitate reflection

- ♦ Out of the description, what is the issue / are the issues that could be addressed in reflective writing? These issues can be raised within the description or separately. They are like bits of velcro to which you can attach the reflective writing.
- ♦ Is there anything else you need to consider at the moment in terms of the context?
- ♦ What is the nature of the significance of this issue to you?
- ♦ How do you feel about it?
- ♦ How do your feelings relate to any action?
- ♦ Was it good / bad – and what are the implications?
- ♦ What do you need to do?
- ♦ What other information do you need (ideas, knowledge, opinion etc)?
- ♦ Are there previous instances of this event, issue arising that will help you to think more/ differently about it?
- ♦ Are there others, or the views of others who are relevant to this matter – and in what way?

Questions that are likely to be helpful in prompting more profound reflection

- ♦ Has the nature of your description of the issue / event (etc) influenced the manner in which you have gone about the reflective writing?
- ♦ Is there relevant formal theory that you need to apply?
- ♦ How do your motives for and the context of the reflective writing affect the manner in which you have gone about the task?

- ◆ In what way might have you tackled the task differently if the context was not one of formal education (perhaps with assessment)?
- ◆ Is there another point of view that you could explore – are there alternative interpretations to consider?
- ◆ Are others seeing this issue from different points of view that may be helpful to you to explore?
- ◆ Does this issue relate to other contexts – reflection on which may be helpful?
- ◆ If you 'step back' from this issue, how does it look different?
- ◆ How do you judge your ability to reflect on this matter ?
- ◆ Do you notice that your feelings about it have changed over time – or in the course of writing this – suggesting that your own frame of reference has changed?
- ◆ Are there ethical / moral / wider social issues that you would want to explore?

Material developed by Jenny Moon, University of Exeter

It can be useful to prompt the description of the subject matter of reflection in terms of a question such as:

- ◆ What is the issue / event / topic / plan / project / task / period of time etc that is to be the subject matter of the reflection?

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- ◆ Was it good / bad – and what are the implications?
- ◆ What do you need to do?
- ◆ What other information do you need (ideas, knowledge, opinion etc)?
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- ◆ How do your motives for and the context of the reflective writing affect the manner in which you have gone about the task?