Peer feedback as assessment practice in doctoral programs: a systematic review of empirical research

La valutazione tra pari come pratica valutativa nei dottorati di ricerca: una rassegna sistematica delle ricerche empiriche

Massimo Marcuccio • Associate Professor • Department of Education Studies "Giovanni Maria Bertin"
• Alma Mater Studiorum - University of Bologna
Liliana Silva • Research Fellow • Department of Education Studies "Giovanni Maria Bertin"
• Alma Mater Studiorum - University of Bologna

Within the broad debate on the use of feedback in Higher Education, peer assessment represents a practice that facilitates student learning through interaction and the promotion of autonomy.

Starting from the definition of assessment practice – which fits into the broader theoretical framework of the balanced assessment system – the use of peer feedback is analyzed in light of the model we have called AsOFAL (Assessment Of, For, As Learning) and within the context of the research doctorate.

The contribution presents a qualitative synthesis of research related to the use of feedback as a practical assessment of students' learning in the research doctorate, with particular reference to the use of peer feedback.

The identification and synthesis of the research was conducted through a systematic review. 11,829 contributions were extracted without time constraints from the query of several aggregators and databases (ProQuest, Scopus, Web of Science, EBSCO). 15 contributions were included in the analysis by means of a text-mining work following a selection of inclusion / exclusion criteria and critical assessment.

The analysis of the literature, selected on the basis of contextual and methodological criteria, allowed the elaboration of a first mapping. The impact of the use of this assessment practice and the possible areas of development are henceforth defined.

Keywords: systematic review, doctoral programs, assessment of learning, peer-feedback, assessment practices, AsOFAL

Nell'ampio dibattito sull'uso del feedback nell'Istruzione Superiore, la valutazione tra pari rappresenta una pratica che facilita l'apprendimento degli studenti attraverso l'interazione e la promozione dell'autonomia.

Partendo dalla definizione di pratica di valutazione – che si inserisce nel più ampio quadro teorico del sistema di valutazione bilanciato – l'uso del feedback tra pari viene analizzato alla luce del modello che abbiamo chiamato AsOFAL (Assessment Of, For, As Learning) e nel contesto del dottorato di ricerca.

Il contributo presenta una sintesi qualitativa della ricerca relativa all'uso del feedback come valutazione pratica dell'apprendimento degli studenti nel dottorato di ricerca, con particolare riferimento all'uso del feedback tra pari.

L'identificazione e la sintesi della ricerca è stata condotta attraverso una revisione sistematica. 11.829 contributi sono stati estratti senza vincoli di tempo dalla query di diversi aggregatori e database (ProQuest, Scopus, Web of Science, EBSCO). 15 contributi sono stati inclusi nell'analisi per mezzo di un lavoro di estrazione di testi in seguito a una selezione di criteri di inclusione/esclusione e valutazione critica.

L'analisi della letteratura, selezionata sulla base di criteri contestuali e metodologici, ha permesso l'elaborazione di una prima mappatura. L'impatto dell'uso di questa pratica di valutazione e le possibili aree di sviluppo sono quindi definiti e commentati.

Parole chiave: rassegna sistematica, dottorato di ricerca, valutazione degli apprendimenti, valutazione tra pari, pratiche valutative, AsOFAL
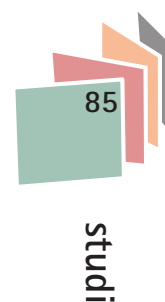
85

studi

Peer Feedback as Assessment Practice in Doctoral Programs: a systematic review of empirical research

Introduction

In recent years doctorate research has been playing an increasingly important role within the social context, evidenced by the increased number of PhD students and defined from a regulatory point of view at the European and international level; it represents a training path – which can be developed both in an academic and professional context – which aims to lead to an advanced research qualification (OECD, 2015). The skills developed during the course fulfill the requirements of a company for trained professionals who are more able to meet the professional standards imposed by the globalized context with adequate skills for an international scale (Padrò, Erwee, Harmes, Harmes, & Danaher, 2018), but above all, these skills contribute to the development of scientific progress. The object of this contribution, among these practices, will be the investigation of the roles that peer assessment forms can take within the doctoral path through a systematic qualitative review of the assessment practices performed and reported by the English-speaking literature, which will be analyzed by the model "AsOFAL", which is an assessment model named by the authors that combines the assessment *of learning* with an assessment *for learning* and *as learning*.

The aim of this research is to describe the peer assessment practices adopted in the English-speaking contexts during the research doctorate, as well as verify their scope and the possibility of future development considering that the assessment of learning is key to analyzing the effectiveness of the university process as well as research at a European and international level.

The importance attributed to research doctorates also emerges from the literature: for example learning experiences, supervisors' practices, and the impact of internationalization, various reviews focused on doctoral candidates' or the professional doctorates' learning. Alongside this literature develops a growing thread related to the debate of peer review, which led to the choice to carry out a systematic review of peer assessment practices within the doctorate, in order to be able to define an overview of empirical research that could be as exhaustive and investigated as possible in an empirical and systematic way.

1. Definition of research object

The object of this survey is therefore peer assessment practices in research doctorates, considering "micro" dimension of practice, which analyzes the practices performed within the doctorate by the various subjects (Boud & Lee, 2009).

Our analysis of the theoretical construct of the research, taken as a theoretical reference, originates from the definition of assessment practice elaborated by the authors. This definition is drafted starting from the contributions of Ponte and Ax (Ax & Ponte, 2007; Ponte & Ax, 2011) relating to the concept of *praxis*, that is declined to the concept of *assessment*, as refered to the concept proposed by Laveault and Allal (2016), whereas the assessment is understood as a «family of assessment situations that involve regulation processes that can be operationalized in many ways» (Laveault & Allal, 2016, p.5), where the existence emerges of an overlapping area between the assessment to regulate (which Laveault and Allal define assessment for learning) and the assessment "to make the point" (Marcuccio, 2016). The purpose of the assessment is therefore intended as a regulation of learning.

Finally, this concept of assessment practice requires the assumption of responsibility on the part of those who perform the action, in the awareness of the models adopted for the attribution of value, in the explication of their cognitive processes, in anticipating the expected results, in the processes to be implemented in order to achieve them, in decentralization, that is, putting oneself in the perspective of the other, and in self-assessment.

Having thus defined the concept of assessment practice, it is therefore necessary to define which of these to investigate. The object of research is the definition of practices that correspond to a balanced concept of assessment. The *Balanced Assessment System* (National Research Council, 2001; Stiggins, 2008) is a normative theoretical model developed in the framework of a theory of nested systems (Williams & Imam, 2007) which, related to the specific topic of assessment in education, places the issue of assessment practices related to learning in a network of interconnections that is divided between different levels of organization and within the same level assuming the close interconnection between different functions, subjects, procedures, tools and uses of assessment. In the context of our research, however, we have attempted to define a model of a balanced assessment system within the context of the research doctorate. This model assumes the principles defined by Stiggins (2008) within the balance between the learning of doctoral candidates and the assessment of research doc-

torates, as outlined by current legislation in a national and European context.

Therefore, improving the assessment of the PhD students' learning takes on the meaning of not only improving their learning but also the quality of the doctorate, of which the legislation requires assessment through the requirements outlined by the guidelines for the accreditation of doctoral courses.

Within this balanced assessment system, the promotion of autonomy – assessment and, more generally, of learning – of the subjects involved in the training relationship (students and teachers in the first place) preventing dysfunctional forms in the relations of power in the educational interaction. This is a model – which we have called AsO-FAL (Assessment Of, For, As Learning) – which makes it possible to document what the students have achieved (assessment *of* learning), helps students plan and regulate activities (assessment *for* learning), and promotes educational experiences useful for students and teachers (assessment *as* learning).

To delimit the object of the research, therefore, reference was made to this assessment model, which in turn is delineated within a social situation in a practical context, limited in space and time, in which human beings act in order to "assess" and take responsibility for their actions.

2. Definition of feedback and peer feedback: an overview

The literature on the use of feedback and peer feedback appears to be, as we have already mentioned, extensive if we consider the English-speaking context. In Italy, however, assessment practices in the university context continue to refer to more traditional models and refer to summative or certification functions (Grion, 2016; Grion, Serbati, &Tino, 2017; Pastore, 2012). In this section we will limit ourselves to recapturing some of the main elements so that they can orient the research presented in the present contribution.

We, therefore, report the more "traditional" definition of the feedback concept, taking the words of Ramaprasad (1983) but also of Sadler (1989): feedback is the information about the gap between the current level and the reference level of a parameter system that is used to modify this gap in some way. This feedback, however, assumes the connotations of an educational tool as it allows the student to understand how to improve their performance, thus transforming the assessment practice into a strategy to reinforce and improve learning (Grion

et al., 2017; Lipnevich & Smith, 2009). The feedback is therefore not realized in a single moment, but rather presents itself as a process that develops in time and which ends with the mental internalization of the student's learning and the demonstration of the same to be able to modify one's own behavior (Boud & Soler, 2015)

In the most current research the concept of feedback is instead defined as an inner generative process through which students build knowledge about the activities they are carrying out and come to understand the objects of study through their assessment acts (Nicol, 2018).

The feedback is therefore an "internal" generative process which is generated by external stimuli of a different nature and allows the student first to receive what is stimulated; secondly, to be able to re-elaborate what is internalized in the light of previous knowledge and therefore to redefine new "internal" contents; then, once such a change that we can define as "mental" occurs, the last step also consists in the "external" change, which takes the form of a change in behavior.

The transition from the first to the second definition makes us assume some fundamental considerations for the perspective of our research:

– the change of perspective of assessment practice, which from "external" is transformed into something "internal" in the subject;
– the transition from a valuation practice more focused on the evaluator to one where the protagonist is the one who receives the feedback;
– the active role assumed by the students in their own learning and assessment process, which therefore allows the subjects to increasingly focus on their own autonomy;
– this autonomy allows them to consolidate key competences related to "learning to learn", which are useful in a lifelong learning perspective.

Our contribution is referenced to the production of "peer-to-peer" feedback which, as Nicol and colleagues point out (2014), research seems to still be little practiced, also because of its problems of sustainability. This assessment practice, however, assumes important characteristics of proactive involvement by the students (Sambell, 2016). It is therefore interesting to consider how much this field is used in the research doctorates where assessment practices can be taken in real practice or research communities, where the subjects who share the same social practice have the same role in assessment and learning. If we were to consider what was defined by Butler and Winne (1995) re-

garding the definition of feedback, we could regard peer feedback as coming from "internal resources", as opposed to feedback from external evaluators (who do not share the same role in the community of practices). This scheme will be used, also, for the definition of the results of our systematic review, as considered by the authors to be the most detailed and exhaustive approach with respect to the analysis conducted in this research.

3. Research objects and questions

The aim of the research is to describe the "state of the art" empirical research regarding the use of feedback as a practice for evaluating students' learning in the doctoral program, with particular reference to the use of peer feedback.

With reference to this objective, the following research questions emerge:

– *What empirical research on the use of peer feedback as an assessment practice is carried out in the English language context within the doctoral program?*
– *What relevance does this research have?*
– *What are areas for their development?*

4. Research design: data collection and procedures[1]

For the construction of the search strings, identified for each database and reported in Table 1, key words were used that describe the object of the survey – that is the assessment – with reference to the two identified terms in English. In light of a first analysis related to the same problem, it was appropriate to also consider some particular forms of assessment, for example the exam (exams or exam) – in order to include the forms of summative assessment – but also the feedback, with reference to the assessment of the training.

The terms that specifically identify the training context in which we intend to investigate the specific object, i.e. the doctorate (Ph.D., PhD, doctora*), have also been considered.

---

1 For methodological references see, for example, Heyvaert et al (2013), Gough et al (2012) and Cooper et al (2009).

Aggregator / Editor	Strings	Output
Proquest	("Ph.D." OR "PhD" OR doctora*) AND (assess* OR evaluat* OR "exam" OR "exams" OR examin* OR feedback*)	3888
Scopus	SUBJAREA(SOCI) AND ABS(("Ph.D." OR "PhD" OR doctora*) AND (assess* OR evaluat* OR "exam" OR "exams" OR examin* OR feedback*))	4195
Web of science	TS=(("Ph.D." OR "PhD" OR doctora*) AND (assess* OR evaluat* OR "exam" OR "exams" OR examin* OR feedback*))	1021
EBSCO	("Ph.D." OR "PhD" OR doctora*) AND (assess* OR evaluat* OR "exam" OR "exams" OR examin* OR feedback*)	2725

Tab.1: Research strings

Figure 1 shows the selection process of the contributions. The research led to the selection of 11,829 contributions for a more in-depth examination of the content of abstracts. The exclusion criteria are as follows:

1) study subject: feedback as assessment practice;
2) research design: empirical research;
3) language of publication: English;
4) publication period: no limit.

Fig.1: Flow-chart of selection process

Excluding the 5,238 duplicates in automatic form, 6,591 contributions remain for the analysis. These contributions were then selected through a text mining extraction (Biemann & Mehler, 2014). The number of contributions that met these criteria were 20. Of these, 2 other selected contributions were added on the basis of an analysis of the terms "peer" and "assessment" but excluding the term feedback. The total number of contributions admitted to the critical assessment phase were 22.

The 22 contributions were critically evaluated based on the quality of the content of the following (following the adapted form of the Dixon-Woods et al., 2006 model):

1) explicit objectives;
2) clear and coherent research design;
3) clear and explicit relationship of the process through which the results are produced;
4) sufficient data to support the results;
5) appropriate and adequately explained method of data analysis.

Furthermore, the authors identified the contributions around which the research questions were discussed. The conclusions drawn from the

theoretical documents are indicated separately and used as evidence to support the results of empirical research or to make comparisons.

For the purpose of the analysis, the authors used "thematic analysis", derived from an aggregative and interpretative approach, which aims to summarize what is already known, based on the various aspects investigated (Tranfield, Denyer, & Smart, 2003). A summary table of the key characteristics of the 15 documents used for the revision is provided in Table 2.

	Author	Publication Year	Subject	Geographic Context
1	*Caffarella & Barnett*	2000	Academic writing support	USA
2	*Larcombe et al.*	2007	Academic writing support	Australia
3	*Stracke*	2010	Peer support groups	Australia
4	*Catterall et al.*	2011	Academic writing support	Australia
5	*Lai*	2011	Support in doctoral thesis proposals	New Zeland
6	*Loureiro et al.*	2012	Assessment of the use of peer feedback within a wiki platform	Portugal
7	*Stepanek & Hradilova*	2013	Academic writing support	Czech Republic
8	*Simpson*	2013	Academic writing support	USA
9	*Nolte et al.*	2015	Peer feedback emerges between the topics to be interviewed by doctoral candidates.	USA
10	*Zhu & Procter*	2015	Feedback obtained by peers through social networks	UK
11	*Wegener et al.*	2016	Support for academic writing and the construction of the researcher's identity	Denmark
12	*Sethares & Morris*	2016	Students' opinions about the use of peer review during the doctoral period	USA
13	*Roulston et al.*	2016	Formal and informal feedback in the area of writing groups	USA
14	*Deshpande*	2017	Support the online doctoral course	Review
15	*McFarlane et al.*	2017	Feedback exchange tool for university students (including doctorate)	Australia

Tab.2: Selected contributions

5. Main results

The main results of the review will be presented starting from the initial questions.

> What are the characteristics of empirical research on the use of peer feedback as an assessment practice carried out in the context of the English language within the doctoral program?

The results relating to the main characteristics of the studies analyzed are as follows. With regard to time distribution, the contributions are distributed as shown in Figure 2.
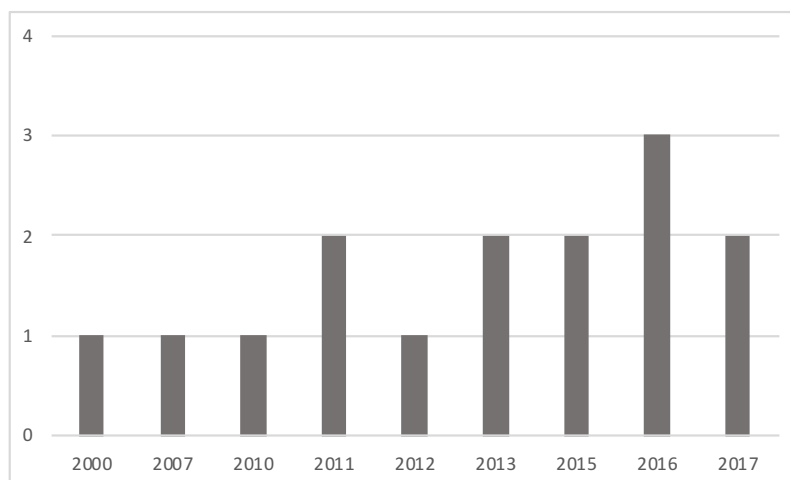
Fig.2: Times cited per years of the analyzed contributions

As for the geographical distribution, the contributions are mainly distributed in the UK (6) and US (5), 2 in the European continent, while 2 others in Oceania.

Regarding the analysis of the descriptive results of the contents of the empirical research selected in our review, we have used a scheme that we have reconstructed from an adaptation of the contribution of Butler and Winne (1995) (Table 2).

SOURCES	internal / external
FUNCTIONS	summative / formative
CONTENT	outcome / process
MEANS	oral / written

Tab.3: Summary of feedback elements (adapted by Butler & Winne, 1995)

Regarding the time of assessment, we referred to the definition of the PhD program proposed by Ampaw and Jaeger (2012), which distinguishes the process in three phases:

– *Transition phase*, to define the transition period from university studies to doctoral activities;
– *Development phase*, to define the period during which the development of the skills necessary for conducting doctoral research takes place;
– *Completion phase of the studies*, to define instead the period of preparation and discussion of the doctoral thesis.

We found that most of the contributions related to peer review were positioned in the central phase, that of training and skills development (12 contributions), while only one contribution refers to the first phase of transition and two contributions to the phase final of the process.

Another result emerged from the analysis of the function of the peer assessment process within the doctoral program. While always referring to the construct that we adapted from Butler & Winne's contribution (1995), we tried to identify practices functions. The result was predominantly in favor of the assessment of training, while 12 contributions compared to 3 referred to a summative assessment.

A similar domain is linked to the content of the peer assessment practice: 13 contributions refer to the process developed during the PhD course, while only 2 refer to the final result of the PhD program. Of these 13 contributions, 9 refer to the support of writing the thesis.

We then analyzed the means through which peer review takes place: 7 contributions have highlighted written assessment practices, 6 presented oral assessment practices and 2 were hybrid form contributions. Furthermore, 5 contributions presented assessment practices that were implemented online.

What relevance does such research have?
To analyze the relevance of the research included in the review, it is necessary to read it in the light of the model AsOFAL, described above, in order to be able to answer the question concerning the definition of peer feedback. In fact, we have defined the AsOFAL model as the three summative, formative and training functions that are absolvent in a single construct. The following Figure 3 shows the functions performed by the research included in the review.
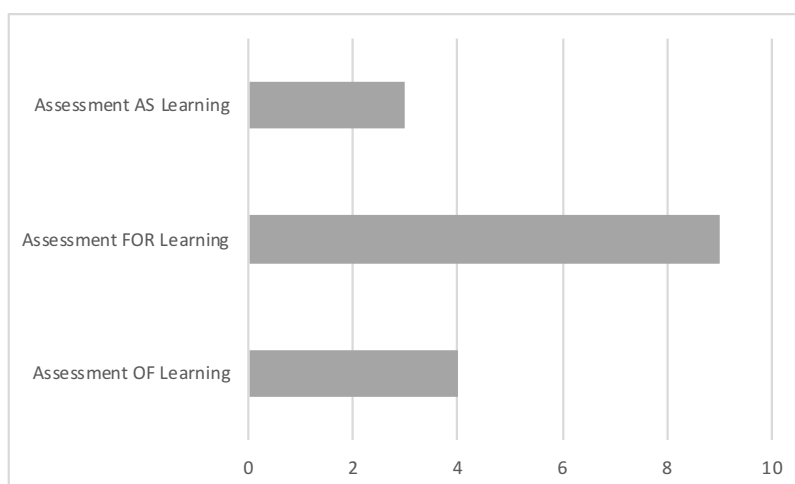
95

Fig.3: Assessment functions in the selected contributions in the review

The results that emerge are the following: no research deals with the problem of assessment practice on the summative, formative and training front in the doctoral process, but with only one function over the entire period considered. Only one of them (5) considers the functions of both summative and formative. Almost all of the selected studies refer to a single assessment function and, therefore, to a single feedback definition.

What are the areas of development?

From the analysis of the contents of the individual contributions emerge some interesting ideas that could be considered in the use of peer feedback within the PhD.

First of all, there is a need to be clearer about the benefits of peer comments and what the process of interpretation and internalization of feedback received from a colleague is. Furthermore, it would be necessary to have a greater influence on the ways in which students are provided feedback, so that a critical process can be developed with regard to the work of colleagues that can be as clear and precise as possible (eg contribution 1).

Secondly, the systematic nature of peer reviews could contribute to a better organization of the feedback transmission system: a clear system could facilitate the practicality and familiarity with the use of this assessment practice (eg contribution 4) and such aspects could favor regularity in the three moments that we have identified of the doctorate path, but also of the articulation in the different functions of the assessment that we have identified in the AsOFAL model.

Another element to be developed concerns the use of feedback shar-

ing platforms: often the use of social networks (eg contribution 10) involves the risk of subtracting ideas, especially in the first phase of transition to the doctoral path. It is therefore necessary to have a serious reflection of an informatics and pedagogical nature that allows a structuring of a platform with tools both of sharing reserved to a small group, and elements of interaction within a wider context.

6. Discussion and conclusions

In light of the results obtained, some reflections are necessary which could open the way for future research.

Considering the small number of selected studies (15), it is necessary to question the possibility of using a peer assessment model that responds to the characteristics of the AsOFAL model already described in the previous paragraphs. Certainly, in the light of the results that emerged, peer review alone cannot meet the needs of this model. Although it assumes an important role in the mainly formative function, it does not seem able to respond to the request for integration of the multiple functions of the assessment practices as described for AsOFAL. The question that can therefore be asked is the following: is it possible to adopt peer feedback as an assessment practice that allows the PhD students to improve their learning throughout the course? It could be considered a fundamental and founding part of a broader model, which allows one to consider other actors in the assessment and that favors the balanced assessment system already described in the first part of the contribution, thus allowing conceptual consistency, completeness of evidence, continuity of the process, finalization of the purpose of assessment practice and impact on student learning (Stiggings, 2008), and a sense of responsibility and participation in the learning process.

There are several models that could allow work of this nature. One example of this is the one proposed by Steen-Utheim & Hopfenbeck (2018), which is based on the use of a portfolio and the enhancement of the responsibility on the part of the actors in drafting feedback.

Always in the light of a balanced system concept, it is worth considering how the improvement of the assessment model within the doctorate can positively influence the assessments of the doctorate itself, both at the university level and at a national level.

Certainly an analysis to be considered is that of the role of feedback – both written and oral – by the doctoral supervisors and the dialogue that takes place between them. Starting from an analysis of the literature, the formal and non-formal assessment practices of tutors and su-

pervisors will be explored in the context of the University of Bologna with some PhDs coming from research doctorates of different subject areas. These practices, already under assessment, will be investigated during the PhD program with the possibility to implement them in an experimental form through a new assessment model that meets the criteria described by AsOFAL.

References

Ampaw F. D., & Jaeger A. J. (2012). Completing the three stages of doctoral education: An event history analysis. *Research in Higher Education*, *53*(6), pp. 640-660.

Ax J., & Ponte P. (2007). Praxis: analysis of theory and practice. In J. Ax & P. Ponte (Eds.), *Critiquing praxis. Conceptual and empirical trends in the teaching profession* (pp. 1-18). Rotterdam: Sense Publishers.

Biemann C., & Mehler A. (Eds.). (2014). *Text Mining: From Ontology Learning to Automated Text Processing Applications*. Cham: Springer.

Boud D., & Lee A. (Eds.). (2009). *Changing practices of doctoral education*. London: Routledge.

Boud D., & Soler R. (2015). Sustainable assessment revisited. *Assessment and Assessment in Higher Education*, *41*(3), pp. 400-413.

Butler D. L., & Winne P. H. (1995). Feedback and self-regulated learning: A theoretical synthesis. *Review of educational research, 65*(3), pp. 245-281.

Caffarella R. S., & Barnett B. G. (2000). Teaching doctoral students to become scholarly writers: The importance of giving and receiving critiques. *Studies in Higher Education*, *25*(1), pp. 39-52.

Catterall J., Ross P., Aitchison C., & Burgin S. (2011). Pedagogical approaches that facilitate writing in postgraduate research candidature in science and technology. *Journal of University Teaching & Learning Practice, 8*(2).

Cooper H., Hedges L. V., & Valentine J. C. (Eds.). (2009). *The handbook of research synthesis and meta-analysis*. New York: Russell Sage Foundation.

Deshpande A. (2017). Faculty best practices to support students in the 'virtual doctoral land'. *Higher Education for the Future, 4*(1), pp. 12-30.

Dixon-Woods M., Bonas S., Booth A., Jones D. R., Miller T., Sutton A. J., ... & Young B. (2006). How can systematic reviews incorporate qualitative research? A critical perspective. *Qualitative research*, *6*(1), pp. 27-44.

Gough D., Oliver S., & Thomas J. (Eds.). (2012). *An introduction to systematic reviews*. London: Sage.

Grion V. (2016). Assessment for learning all'università: uno strumento per modernizzare la formazione. In M. Fedeli, V. Grion, & D. Frison, *Coinvolgere per apprendere. Metodi e tecniche partecipative per la formazione* (pp.289-317). Lecce-Brescia: Pensa Multimedia.

Grion V., Serbati A., Tino C., & Nicol D. (2017). Ripensare la teoria della valutazione e dell'apprendimento all'università: un modello per implementare

pratiche di peer review. *Italian Journal of Educational Research*, *(19)*, pp. 209-226.

Heyvaert M., Maes B., & Onghena P. (2013). Mixed methods research synthesis: definition, framework, and potential. *Quality & Quantity, 47*(2), pp. 659-676.

Lai K. W. (2011). Using collaborative peer feedback and supervision to support doctoral research at a distance. In G. Williams, P. Statham, N. Brown, & B. Cleland (Eds.), *Changing Demands, Changing Directions. Proceedings ascilite Hobart 2011* (pp.747-757). Hobart: University of Tasmania.

Larcombe W., McCosker A., & O'Loughlin K. (2007). Supporting education PhD and DEd students to become confident academic writers: An assessment of thesis writers' circles. *Journal of University Teaching and Learning Practice*, *4*(1), pp. 54-63.

Laveault D., & Allal L. (Eds.). (2016). *Assessment for learning. Meeting the challenge of implementation*. Cham: Springer.

Lipnevich A. A., & Smith J. K. (2009). Effects of differential feedback on students' examination performance. *Journal of Experimental Psychology: Applied*, *15*(4), pp. 319-333.

Loureiro M. J., Pombo L., & Moreira A. (2012). The quality of peer assessment in a wiki-based online context: a qualitative study. *Educational Media International*, *49*(2), pp. 139-149.

Marcuccio M. (2016). *Imparare a imparare nei contesti scolastici. Prospettive e sfide per l'innovazione didattica*. Roma: Armando Editore.

McFarlane R., Spes-Skrbis M., & Taib A. (2017). Let's Chat-A fresh take on the invaluable role of peer-to-peer conversation in student engagement, participation and inclusion. *Student Success, 8*(2), pp. 107-111.

National Research Council. (2001). *Knowing what students know: The science and design of educational assessment*. National Academies Press.

Nicol D., Thomson A., & Breslin C. (2014). Rethinking feedback practices in higher education: a peer review perspective. *Assessment & Assessment in Higher Education*, *39*(1), pp. 102-122.

Nicol, D. (2018). Unlocking generative feedback through peer reviewing. In V. Grion & A. Serbati (Eds.), *Valutare l'apprendimento o valutare per l'apprendimento? Verso una cultura della valutazione sostenibile all'Università* (pp. 47-59). Lecce: Pensa Multimedia.

Nolte M. C., Bruce M. A., & Becker K. W. (2015). Building a community of researchers using the research mentoring model. *The Journal of Counselor Preparation and Supervision, 7*(2), Article 1.

OECD. (2015). ISCED 2011 level 8: Doctoral or equivalent level. In *ISCED 2011 Operational Manual: Guidelines for Classifying National Education Programmes and Related Qualifications* (pp.97-101). Paris: OECD Publishing.

Padró F. F., Erwee R., Harmes M., Harmes M., & Danaher P.A. (Eds.). (2018). *Postgraduate Education in Higher Education*. Singapore: Springer.

Pastore S. (2012). Silent assessment? Cosa pensano della valutazione gli studenti universitari. *Italian Journal Of Educational Research*, pp. 62-73.

99

Ponte P., & Ax J. (2011). Inquiry-based professional learning in educational praxis: knowing why, what and how. In N. Mockler & J. Sachs (Eds.), *Rethinking educational practice through reflexive inquiry* (pp. 49-60). Dordrecht: Springer.

Ramaprasad A. (1983). On the definition of feedback. *Behavioral science*, *28*(1), pp. 4-13.

Roulston K., Teitelbaum D., Chang B., & Butchart R. (2016). Strategies for developing a writing community for doctoral students. *International Journal for Researcher Development, 7*(2), pp. 198-210.

Sadler D. R. (1989). Formative assessment and the design of instructional systems. *Instructional science*, *18*(2), pp. 119-144.

Sambell K. (2016). Assessment and feedback in higher education: considerable room for improvement? *Student Engagement in Higher Education, 1*(1).

Sethares K. A., & Morris N. S. (2016). Learning About and Benefiting From Peer Review: A Course Assignment for Doctoral Students at Two Different Universities. *Journal of Nursing Education, 55*6), pp. 342-344.

Simpson, S. (2013). Systems of writing response: A Brazilian student's experiences writing for publication in an environmental sciences doctoral program. *Research in the Teaching of English*, pp. 228-249.

Steen-Utheim A., & Hopfenbeck T. N. (2018). To do or not to do with feedback. A study of undergraduate students' engagement and use of feedback within a portfolio assessment design. *Assessment & Assessment in Higher Education*, *44*(1), pp. 80-96.

Stepanek L., & Hradilova A. (2013). Designing ICT-enhanced language programmes: Academic writing for postgraduate studies. *Language Learning in Higher Education*, *2*(1), pp. 163-171.

Stiggins R. (2008). *A call for the development of balanced assessment systems. Assessment Manifest*o. Portland: ETS Assessment Training Institute.

Stracke E. (2010). Undertaking the journey together: Peer learning for a successful and enjoyable PhD experience. *Journal of University Teaching & Learning Practice, 7*(1).

Tranfield D., Denyer D., & Smart P. (2003). Towards a methodology for developing evidence informed management knowledge by means of systematic review. *British journal of management*, *14*(3), pp. 207-222.

Wegener C., Meier N., & Ingerslev K. (2016). Borrowing brainpower–sharing insecurities. Lessons learned from a doctoral peer writing group. *Studies in Higher Education, 41*(6), pp. 1092-1105.

Williams B., & Imam I. (2007). *Systems concepts in assessment: An expert anthology*. Point Reyes: EdgePress of Inverness.

Zhu Y., & Procter R. (2015). Use of blogs, twitter and facebook by UK PhD students for scholarly communication. *Observatorio (OBS*), 9*(2), pp. 29-46.