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## **Defining Learner Self-Assessment**

# Anastasia Papanthymou<sup>1</sup> & Maria Darra<sup>1</sup>

## Abstract

The aim of the present study was to examine the conceptual content of learner self-assessment by analyzing 28 publications concerning primary, secondary and inclusive education and different teaching subjects. From the analysis nine dimensions of learner self-assessment emerged as they were more frequently reported. These are: a. learner-centered pedagogy, feedback and learning orientation that were included in a broader category, "context" b. quality learning, collaboration/involvement and formative assessment that were included in the category "learner role" and c. monitoring, reflection and review/control that were dimensions of a more general category that was called "processes". Definitions in the context of primary and secondary education are mainly based on the dimension of learner-centered pedagogy and reflection. Moreover, in the context of inclusive education and various teaching subjects, the dimensions of formative assessment and quality learning are not identified in definitions whereas the number of publications that was located was extremely small. Consequently, it is concluded that more research is needed on the conceptual content of learner self-assessment in contexts such as inclusive education and several teaching subjects in order to produce a more defined concept of self-assessment and its characteristics within these contexts.

Keywords: dimensions of self-assessment, inclusive education, learner self-assessment, primary education, secondary education

## 1. Introduction

The most effective way for learners to develop their autonomy is when they are directly involved in the creation, assessment and review of their work (Hawe & Parr, 2014). There is need to focus on learners and they should be completely committed to learning (OECD, 2013). The mission of the school is to prepare young people and provide them with skills and knowledge they will need in the future (Ioannidis, 2013). An important lifelong learning skill is that learners can assess their own progress (OECD, 2013). Self-assessment is one of the most important skills that learners need to have for future professional development and lifelong learning as it develops learners' ability to be self-assessors of their own learning (Wride, 2017). According to McMillan and Hearn (2008) learners can lead to higher achievement with significant motivation when they set goals that lead to better understanding, when they define criteria, self-asses their learning improvement, reflect on their learning and create strategies that promote learning.

Learner self-assessment is different from other external assessment procedures such as test etc. because it is an inner practice that is conducted and monitored by the learner. Moreover, self-assessment provides several sources of feedback that could not be accessible when the assessment was carried out externally. Specifically, in the procedure of self-assessment, feedback can be provided by comments and external scores given by the marker as well as documents with quality criteria expected but elements such as learners' own ideas, emotions, values and ideas can be more easily accessed (Yan & Brown, 2017). Furthermore, self-assessment is a continuous procedure that involves editing and review. In formative assessment, this may take the form of involving learners to critique their work as long as they monitor their progress and review (Perumanathan, 2014).

<sup>&</sup>lt;sup>1</sup> Department of Primary Education, University of the Aegean, Dimokratias 1, 85132, Rhodes, Greece Corresponding author: Anastasia Papanthymou, E-mail: pred17005@aegean.gr, Tel: 30-694-833-9499

This paper aims at analyzing the conceptual content of the term learner self-assessment as it has been defined through the discussions and descriptions of various researchers, authors and experts. First, a conceptual map for the definition of learner self-assessment was created, and then a table that includes nine dimensions emerged. These dimensions concern the context, the role of the learner and the processes of learner self-assessment.

## 2. Methodology

First, a literature review was conducted which led to the creation of a list of elements that are considered to be important and used by various authors, experts and researchers who attempted to conceptually approach the learner self-assessment. A similar methodology was used by Frey, Schmitt, and Allen (2012), who presented a conceptual analysis for the term of authentic assessment. Self-assessment was examined in the context of primary and secondary education (e.g. Bailey, 1979; Andrade, 1999; Rolheiser & Ross, 2001), inclusive education (e.g. Bourke & Mentis 2007, 2013) and various teaching subjects (e.g. Brown & Hudson, 1998; Weisi & Karimi, 2013).

28 publications have been located in journal articles, conferences, books, and various scientific papers, where several authors approached the meaning of self-assessment by giving several elements of it or by providing an unaltered definition of self-assessment procedure through which these elements or dimensions emerged. Then, the term self-assessment was examined in the context of primary and secondary education (nineteen publications), inclusive education (two publications) and different teaching subjects (7 publications). The outcome of this procedure was a concept analysis of learner self-assessment.

#### 2.1 Identifying Dimensions of Learner Self-Assessment

There was some subjectivity for identifying distinct dimensions or components of self-assessment. Researches present below how they worked in order to identify some of the components of self-assessment as they emerged from the publications' original text phrases.

"Self assessment means that students make judgements about their own achievement and learning processes and take part in decisions about action for further progress in learning." (Sebba, Crick, Yu, Lawson, Harlen, & Durant, 2008, p. 6).

"...demands a greater shared understanding between pupils and the teacher of the purpose, process and product of learning." (Dann, 1996, p. 57).

The above were classified as *collaboration/ involvement*.

Below, there are some examples of phrases that were all classified as *learner-centered pedagogy*.

"Self-assessment is one form of alternative assessment which seeks to make the assessment process more studentcentered..." (Weisi & Karimi, 2013, p. 732).

"The focus is on 'self' (learner)..." (Harrison, O'Hara, & McNAMARA, 2015, p. 87).

Subsequently, for the dimension *formative assessment*, the following example is given.

"...self-assessment is a valid and reliable technique for assessing student performance, particularly in contexts in which self-assessments are used for formative rather than summative purposes..." (Ross & Starling, 2008, p. 183). Accordingly, for the dimension *reflection*, the following example is presented.

"...Self-assessment with this focus is an integral part of the reflective approach to learning..." (Little, Perclová, & del' Europe, 2001, p. 55-56).

Finally, for the dimension *learning orientation*, the following example is given.

"In practice, student self-assessment is the act of examining the process of learning rather than examining the end product of learning." (Bailey, 1979, p. 86).

In the early stages of the literature review, a conceptual map was designed and the basic characteristics of the learner self-assessment were drawn from each publication. This led to create labels for the items that were found.

Common or similar components of the definitions were entered in the same column, and as the study of the material was in progress and other characteristics were emerged, the original categories were revised to include these new components. Therefore, similar components have been combined in order to have a category, as the purpose was to have as few categories as possible. Finally, nine dimensions of self-assessment emerged and the frequency of each dimension in publications was presented, in order to show the importance of every component.





Figure 1.Initial Pilot Identification of Components of Learner Self-Assessment

## 3. Results

The most frequently reported dimensions of learner self-assessment were grouped into the following three categories:

- a) the context of the self-assessment
- •Learner-centered pedagogy
- Feedback
- •Learning orientation
- b) the role of the learner
- •Quality learning
- •Collaboration/Involvement
- •Formative assessment
- c) the processes
- Monitoring
- •Reflection
- •Review/Control

Table 1 summarizes the publications that were studied and referred to self-assessment in the context of primary and secondary education, while Table 2 includes publications that are related to various teaching subjects and inclusive education. For each scientific text, article, or book where a dimension of self-assessment was part of the definition as it was presented in the publication, the cell associated with that dimension was shaded. Table 1 presents the relative frequency of each dimension of self-assessment, while for Table 2, it was not considered necessary to give the relative frequencies, due to the small number of publications.

	Context			Learner role			Processes			
	Learner centered pedagogy	Feedback	Learning orientation	Quality learning	Collaboration/Involvement	Formative assessment	Monitoring	Reflection	Review/Control	
Relative frequency of each dimension	63%	21%	21%	16%	26%	16%	11%	58%	16%	
Bailey, 1979										
Towler & Broadfoot, 1992										
Dann, 1996										
Blatchford, 1997										
Andrade, 1999										
Rolheiser & Ross, 2001										
Paris, S.G. & Paris, A.H., 2001										
Ross, Hogaboam-Gray, & Rolheiser, 2002										
Black, Harrison, Lee, Marshall, & Wiliam, 2004										
Noonan & Duncan, 2005										
Sebba, Crick, Yu, Lawson, Harlen, & Durant, 2008										
Ross & Starling, 2008										
Kostova & Atasoy, 2009										
Joyce, Spiller, & Twist, 2009										
Panadero, Tapia, & Huertas, 2012										
Harris & Brown, 2013										
Brown & Harris, 2014										
Harrison, O'Hara, & McNAMARA, 2015										
Yan, 2018										
	Bailey, 1979 Towler & Broadfoot, 1992 Dann, 1996 Blatchford, 1997 Andrade, 1999 Rolheiser & Ross, 2001 Paris, S.G. & Paris, A.H., 2001 Ross, Hogaboam-Gray, & Rolheiser, 2002 Black, Harrison, Lee, Marshall, & Wiliam, 2004 Noonan & Duncan, 2005 Sebba, Crick, Yu, Lawson, Harlen, & Durant, 2008 Ross & Starling, 2008 Kostova & Atasoy, 2009 Joyce, Spiller, & Twist, 2009 Panadero, Tapia, & Huertas, 2012 Harris & Brown, 2013 Brown & Harris, 2014 Harrison, O'Hara, & McNAMARA, 2015 Yan, 2018	Relative frequency of each dimension63%Bailey, 1979Towler & Broadfoot, 1992Dann, 1996Blatchford, 1997Andrade, 1999Rolheiser & Ross, 2001Paris, S.G. & Paris, A.H., 2001Ross, Hogaboam-Gray, & Rolheiser, 2002Black, Harrison, Lee, Marshall, & Wiliam, 2004Noonan & Duncan, 2005Sebba, Crick, Yu, Lawson, Harlen, & Durant, 2008Ross & Starling, 2008Kostova & Atasoy, 2009Joyce, Spiller, & Twist, 2009Panadero, Tapia, & Huertas, 2012Harris & Brown, 2013Brown & Harris, 2014Harrison, O'Hara, & McNAMARA, 2015	Relative frequency of each dimension63%21%Bailey, 1979Towler & Broadfoot, 1992Dann, 1996Blatchford, 1997Andrade, 1999Rolheiser & Ross, 2001Paris, S.G. & Paris, A.H., 2001Ross, Hogaboam-Gray, & Rolheiser, 2002Black, Harrison, Lee, Marshall, & Wiliam, 2004Noonan & Duncan, 2005Sebba, Crick, Yu, Lawson, Harlen, & Durant, 2008Ross & Starling, 2008Kostova & Atasoy, 2009Joyce, Spiller, & Twist, 2009Panadero, Tapia, & Huertas, 2012Harris & Brown, 2013Brown & Harris, 2014Harrison, O'Hara, & McNAMARA, 2015Yan, 2018	Relative frequency of each dimension63%21%21%Bailey, 1979Towler & Broadfoot, 1992Dann, 1996Blatchford, 1997Andrade, 1999Rolheiser & Ross, 2001Paris, S.G. & Paris, A.H., 2001Ross, Hogaboam-Gray, & Rolheiser, 2002Black, Harrison, Lee, Marshall, & Wiliam, 2004Noonan & Duncan, 2005Sebba, Crick, Yu, Lawson, Harlen, & Durant, 2008Kostova & Atasoy, 2009Joyce, Spiller, & Twist, 2009Panadero, Tapia, & Huertas, 2012Harris & Brown, 2013Brown & Harris, 2014Harrison, O'Hara, & McNAMARA, 2015Yan, 2018	Relative frequency of each dimension63%21%21%16%Bailey, 1979 </td <td>Relative frequency of each dimension63%21%21%16%26%Bailey, 1979IIIIITowler &amp; Broadfoot, 1992IIIIIDann, 1996IIIIIIBlatchford, 1997IIIIIIAndrade, 1999IIIIIIRolheiser &amp; Ross, 2001IIIIIIParis, S.G. &amp; Paris, A.H., 2001IIIIIRoss, Hogaboam-Gray, &amp; Rolheiser, 2002IIIIIBlack, Harrison, Lee, Marshall, &amp; Wiliam, 2004IIIINoonan &amp; Duncan, 2005IIIIISebba, Crick, Yu, Lawson, Harlen, &amp; Durant, 2008IIIIKostova &amp; Atasoy, 2009IIIIIJoyce, Spiller, &amp; Twist, 2009IIIIIPanadero, Tapia, &amp; Huertas, 2012IIIIIHarris &amp; Brown, 2013IIIIIIBrown &amp; Harris, 2014IIIIIIHarrison, O'Hara, &amp; McNAMARA, 2015IIIIIYan, 2018IIIIIII</td> <td>Relative frequency of each dimension63%21%21%16%26%16%Bailey, 1979IIIIIIITowler &amp; Broadfoot, 1992IIIIIIIDann, 1996IIIIIIIIBlatchford, 1997IIIIIIIIAndrade, 1999III<t< td=""><td>Relative frequency of each dimension63%21%21%16%26%16%11%Bailey, 1979<td< td=""><td>Relative frequency of each dimension63%21%21%16%26%16%11%58%Bailey, 1979IIIIIIIIII58%Bailey, 1979IIIIIIIIII58%Towler &amp; Broadfoot, 1992IIIIIIIIIIIIIIIDann, 1996II</td></td<></td></t<></td>	Relative frequency of each dimension63%21%21%16%26%Bailey, 1979IIIIITowler & Broadfoot, 1992IIIIIDann, 1996IIIIIIBlatchford, 1997IIIIIIAndrade, 1999IIIIIIRolheiser & Ross, 2001IIIIIIParis, S.G. & Paris, A.H., 2001IIIIIRoss, Hogaboam-Gray, & Rolheiser, 2002IIIIIBlack, Harrison, Lee, Marshall, & Wiliam, 2004IIIINoonan & Duncan, 2005IIIIISebba, Crick, Yu, Lawson, Harlen, & Durant, 2008IIIIKostova & Atasoy, 2009IIIIIJoyce, Spiller, & Twist, 2009IIIIIPanadero, Tapia, & Huertas, 2012IIIIIHarris & Brown, 2013IIIIIIBrown & Harris, 2014IIIIIIHarrison, O'Hara, & McNAMARA, 2015IIIIIYan, 2018IIIIIII	Relative frequency of each dimension63%21%21%16%26%16%Bailey, 1979IIIIIIITowler & Broadfoot, 1992IIIIIIIDann, 1996IIIIIIIIBlatchford, 1997IIIIIIIIAndrade, 1999III <t< td=""><td>Relative frequency of each dimension63%21%21%16%26%16%11%Bailey, 1979<td< td=""><td>Relative frequency of each dimension63%21%21%16%26%16%11%58%Bailey, 1979IIIIIIIIII58%Bailey, 1979IIIIIIIIII58%Towler &amp; Broadfoot, 1992IIIIIIIIIIIIIIIDann, 1996II</td></td<></td></t<>	Relative frequency of each dimension63%21%21%16%26%16%11%Bailey, 1979 <td< td=""><td>Relative frequency of each dimension63%21%21%16%26%16%11%58%Bailey, 1979IIIIIIIIII58%Bailey, 1979IIIIIIIIII58%Towler &amp; Broadfoot, 1992IIIIIIIIIIIIIIIDann, 1996II</td></td<>	Relative frequency of each dimension63%21%21%16%26%16%11%58%Bailey, 1979IIIIIIIIII58%Bailey, 1979IIIIIIIIII58%Towler & Broadfoot, 1992IIIIIIIIIIIIIIIDann, 1996II	

# Table 1. Definitions of Learner Self-Assessment in Primary and Secondary Education

\*Shaded areas indicate presence of each dimension

			Context			Learner role			Processes		
			Learner centered pedagogy	Feedback	Learning orientation	Quality learning	Collaboration/Involvement	Formative assessment	Monitoring	Reflection	Review/Control
1	Inclusive	Bourke & Mentis, 2007									
2	education	Bourke & Mentis, 2013									
1	Learning and teaching languages	Blue, 1994									
2		Brown & Hudson, 1998									
3		Little, Perclová, & de l'Europe, 2001									
4		Javaherbakhsh, 2010									
5		Weisi & Karimi, 2013									
6		Liu & Brantmeier, 2019									
1	Mathematics	Stallings & Tascoine, 1996									

## Table 2. Definitions of Learner Self-Assessment in Inclusive Education and Various Teaching Subjects

\*Shaded areas indicate presence of each dimension

## 4. Discussion

## 4.1 Learner Self-Assessment in Primary and Secondary Education

In the context of primary and secondary education the dimensions with the highest relative frequency are the *learner-centered pedagogy* (63%) that belongs to "context" and *reflection* (58%) that belongs to the broader category "processes", followed by *collaboration/involvement* (26%) which belongs to category "learner role", *learning orientation* (21%), *feedback* (21%), *review/control* (16%), *formative assessment* (16%), *quality learning* (16%), and *monitoring* (11%).

The dimension *learner-centered pedagogy* is a key element of self-assessment as it aims at academic, personal and social improvement (Bailey, 1979), the cultivation of skills such as self-regulation of learners (Paris, S.G. & Paris, A.H., 2001), self-efficacy, self-motivation (Rolheiser & Ross, 2001) and the acquisition of independence (Black et al., 2004). Self-assessment is referred by some researchers as the ability of learners to self-assess (Nooman & Duncan, 2005). Furthermore, Harrison et al. (2015) note that the focus of self-assessment is on learners. Moreover, the existence of clearly defined criteria that learners use to assess their work (Andrade, 1999), the existence of clear expectations about the objectives (Panadero et al., 2012), and generally, the clear understanding of the criteria and learning goals (Sebba et al., 2008), can be included in this dimension because all show a focus on learners, on the importance of understanding by them the criteria and expectations associated with their learning.

The dimension *reflection* is reported by many researchers as an element of self-assessment. For instance, Towler and Broadfoot (1992) note that self-assessment involves reflection. Besides, other researchers underline that the self-assessment process requires learners' reflection on the interpretation and completion of their tasks (Dann, 1996) or that self-assessment is a process where learners check whether they meet the objectives of a task (Andrare, 1999) or self-assessment is the assessment of personal interests, effort, level of understanding and strategies used by learners on a task (Paris, S.G. & Paris, A.H., 2001). Still, self-assessment is the learners' judgment about their achievements (Blatchford, 1997; Sebba et al., 2008) and learning procedures (Sebba et al., 2008). Moreover, self-assessment is also a process where learners identify strengths and weaknesses in their learning (Ross et al., 2002; Yan, 2018).

The dimension *collaboration/involvement* seems to be an equally important part of the definitions, albeit to a lesser degree. Researchers define self-assessment as a process where learners participate in some or all aspects of the assessment (Joyce et al., 2009). Furthermore, others consider that an essential element of self-assessment is the shared understanding between learners and teachers of the learning purpose, process and outcome (Dann, 1996). Additionally, other researchers underline the element of learners' participation in decision-making about actions that are required for their progress in learning (Sebba et al., 2008), while other researchers such as Harrison et al., (2015) note the collaboration between learners and teacher.

Definitions of self-assessment are based to a lesser degree on the dimensions *learning orientation* and *feedback*. Regarding the first dimension, Paris, S.G. and Paris, A.H. (2001) refer to self-assessment of learning, whereas Sebba et al. (2008) mention that learners assess the learning procedures or according to Bailey (1979) learners examine the learning procedure rather that the outcome of the learning (Bailey, 1979). Moreover, Black et al. (2004) underline that self-assessment contributes to improvement of learning.

With regard to the dimension *feedback*, it is noted that in self-assessment learners can gather directly information about their performance, so it is not necessary to wait someone else (Sebba et al., 2008). Self-assessment is defined inter alia as a process where learners collect information about their performance (Yan, 2018), or dimension *feedback* is reported as an outcome of self-assessment and exists as a single element within the definitions as written below: "Self-assessment should be incorporated systematically into teaching strategies and practices at all levels and only in this way it can provide informed feedback to pupils..." (Kostova & Atasoy, 2009, p. 62).

Dimensions, review/control, formative assessment and quality learning are found in definitions less than previous dimensions. Analytically, regarding the dimension review/control there are researches that characterize self-assessment as a procedure of reviewing that includes reflection (Towler & Broadfoot, 1992), while other researchers such as Kostova and Atasoy (2009, p. 50) define self-assessment as "... a structured process of review, which compares what actually happened against what was intended to happen." Moreover, Harrison et al. (2015) underline that self-assessment allows learners to have more control of their learning and assessment.

The dimension *formative assessment*, that is supported by the formative purpose of self-assessment (Ross & Starling, 2008), and *quality learning* that is linked to quality characteristics of learners' work (Harris & Brown, 2013), quality of arguments (Black et al., 2004) and quality of the learning process and its outcomes (Yan, 2018), are dimensions that are found in definitions and characteristics of self-assessment at the same degree. Finally, *monitoring* which is about the monitor of learners' work (Andrade, 1999) and progress (Paris, S.G. & Paris, A.H., 2001) is the dimension with the least frequency of occurrence in definitions.

#### 4.2 Learner Self-Assessment in Inclusive Education and Various Teaching Subjects

In inclusive education, the dimensions that prevail are *learning orientation*, *learner-centered pedagogy*, *reflection*, *collaboration/involvement*, followed by *feedback*. Regarding the dimension *learning orientation*, researchers such as Bourke and Mentis (2007) characterize self-assessment as a learning tool, while the same researchers, Bourke and Mentis (2013, p. 864), define self-assessment as "...the 'understanding' of how I learn and when I learn in relation to my own and others' goals for me in this context." and they emphasize the learning rather than the outcomes.

Furthermore, self-assessment helps learners know themselves better (Bourke & Mentis 2007, 2013), develops a sense of identity and empowerment (Bourke & Mentis, 2007), whereas learners are central to their learning and assessment (Bourke & Mentis, 2013) something that is related to the dimension *learner-centered pedagogy*.

Besides, the dimension *reflection* is reported in definitions, as self-assessment is a process through which learners need to identify the goals for learning, measure performance according to these goals, and reflect on how this contributes to self-knowledge. Moreover, self-assessment is also a process through which learners can understand more about how they learn, how they interact with others and who they are (Bourke & Mentis, 2007). Additionally, in self-assessment learners may think whether they have learned in different ways (Bourke & Mentis, 2013).

Moreover, the dimension *involvement* is supported from the fact that self-assessment positively involves learners in the assessment (Bourke & Mentis, 2007), while self-assessment and inclusion are procedures that allow and confirm the voice of learners in all forms of teaching and assessment (Bourke & Mentis, 2013).

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Finally, an additional element of self-assessment in inclusive education is *feedback*, as learners gather information about their knowledge, values, skills, needs, beliefs and interactions (Bourke & Mentis, 2007).

For teaching and learning languages, the dimension *learner-centered pedagogy* prevails, followed by *reflection*, *learning orientation*, *review/control, monitoring, feedback* and *collaboration/ involvement*.

Brown and Hudson (1998) note that self-assessments require learners to assess their own language through self-assessment of performance, understanding or observation, while according to Little et al. (2001) learners' communication capacity and linguistic competence are objectives of self-assessment in the context of language learning, and the previous support the dimension *learner-centered pedagogy*. Still, self-assessment helps learners to achieve their goals (Blue, 1994) and it is used to prepare learners for efficiency and improvement in their lives. According to theories of learner autonomy self-assessment plays an important role in language teaching because it is an instrument for autonomous lifelong learning (Javaherbakhsh, 2010), and therefore it is oriented towards learning and promotes learners' autonomy. Liu and Brantmeier (2019) refer to the use of self-assessment as a metacognitive tool, while Weisi and Karimi (2013) note that self-assessment plays a key role in metacognition and as a form of alternative assessment seeks to make the assessment process more focused on learner in order to support and maximize the learning. In this case, *learner-centered pedagogy* and *learning orientation* are dimensions that characterize self-assessment.

Self-assessment is a continuous process and its goal at an intermediate stage of a language learning program is for learners to think about their current level in terms of both their starting level and their level of goals (Blue, 1994). Through the self-assessment process, learners learn to discern the patterns of strengths and weaknesses and judge their learning (Javaherbakhsh, 2010). Additionally, learners should be able to assess their progress, their degree of learning, and how successfully they perform their own tasks and meet specific goals of learning. Hence, selfassessment is an integral part of reflective learning (Little et al., 2001).

Moreover, when learners self-asses they can think about the effectiveness of the learning process and review their methodology (Blue, 1994), so there is the element of reviewing in the self-assessment procedure.

Another dimension in language learning is the *monitoring* of progress, which can be fed and benefited from self-assessment (Blue, 1994), and therefore the dimension of *feedback* is involved. Finally, one more dimension that is reported is *collaboration/involvement* as Weisi and Karimi (2013) note that learner self-assessment is an important strategy where learners participate in their own assessment procedure of learning.

Finally, in mathematics, self-assessment is defined as a process where learners control the type of mistakes they made (Stallings & Tascoine, 1996).

## 5. Conclusions

This study attempts to conceptually approach the learner self-assessment in primary and secondary education as well as in inclusive education and in different teaching subjects by collecting and studying publications in books, scientific texts and articles in journals and conferences.

Nine concepts emerged from the content analysis that was included per three in a broader category. Specifically, these concepts or dimensions are: *learner-centered pedagogy, feedback* and *learning orientation* that were included in the category "context". *Quality learning, collaboration/involvement* and *formative assessment* that were included in the category "learner role" and *monitoring, reflection, review/control* that were included in the broader category "processes".

Particularly, for primary and secondary education, the dimension *learner-centered pedagogy* prevails in the category "context", the dimension *collaboration/involvement* prevails in the category "learner role" and the dimension *reflection* prevails in the category "processes".

Conceptual approaches and self-assessment features that were studied in publications about primary and secondary education are primarily based on the dimension *learner-centered pedagogy*, as self-assessment focuses on learners, whereas the criteria that learners use to self-asses, the learning goals and the expectations for the stated goals should be clear to them. Besides, there are several benefits that learners can gain from the self-assessment process, such as the cultivation of skills (e.g. self-regulation, motivation, etc.).

The concept of self-assessment also includes the dimension *reflection* to a large extent as self-assessment is a process that involves learners' reflection on their tasks. Besides, learners judge their achievements, assess their effort,

the degree of their understanding and their personal interests or their strategies. Additionally, through selfassessment, learners identify strengths and weaknesses in their learning and control the extent to which they meet the goals of a task.

Furthermore, *collaboration/involvement* is a dimension with smaller but important presence in definitions. Particularly, self-assessment includes the element of co-operation between the teacher and learners and the shared understanding of the learning purpose, process and outcome. Besides, it is a process that promotes the participation of learners in assessment and decision making according to their progress. Self-assessment is learning-oriented, as it aims not only to assess learning and check the learning process but also to improve learning, but the dimension *learning orientation* does not cover a large part of the definitions compared to the three above dimensions that were analyzed.

Self-assessment has a predominantly formative purpose, but the dimension *formative assessment* in not reported so often in definitions. The concept of self-assessment is identical to that of *feedback*, as the first is reported as a process of collecting information about learners' performance, while on the other hand feedback can be an outcome of self-assessment. With regard to the dimension *review/control*, it is noted that the concept of self-assessment is identical to the concept of review, as self-assessment is reported as a reviewing procedure that compares what happens with what will happen, while self-assessment is also characterized as a review process that involves reflection. Moreover, self-assessment helps learners to have more control of their assessment and learning.

Quality learning is related to quality elements of learners' work and arguments, as well as the quality of the learning process and learning product and it is a dimension that is reported to a small extent in the context of primary and secondary education.

Finally, the dimension *monitoring*, which is related to the monitoring of the work and the progress of the learners, is also reported to a lesser extent in primary and secondary education.

Definitions and characteristics of learner self-assessment that were searched in the context of inclusive education and various teaching subjects did not lead to the finding of many publications. Moreover, it is noted that the dimensions of *quality learning* and *formative assessment* have not been reported in definitions, while the dimensions *learner-centered pedagogy*, *reflection* and *learning orientation* were the most frequently reported. Consequently, it is concluded that more effort is needed to conceptually approach self-assessment to more defined contexts such as inclusive education and various teaching subjects in order to produce a more specific and comprehensive concept of self-assessment and its characteristics within these contexts.

#### References

- Andrade, H. G. (1999). Student Self-Assessment: At the Intersection of Metacognition and Authentic Assessment. Retrieved from https://eric.ed.gov/?id=ED431030
- Bailey, G. D. (1979). Student self-assessment: helping students help themselves. Kappa Delta Pi Record, 15(3), 86-96. doi: 10.1080/00228958.1979.10518180
- Black, P., Harrison, C., Lee, C., Marshall, B., & Wiliam, D. (2004). Working inside the black box: Assessment for learning in the classroom. Phi Delta Kappan, 86(1), 9-21. doi:10.1177/003172170408600105
- Blatchford, P. (1997). Students' self-assessment of academic attainment: Accuracy and stability from 7 to 16 years and influence of domain and social comparison group. Educational Psychology, 17(3), 345-359. doi: 10.1080/0144341970170308
- Blue, G. M. (1994). Self-Assessment of Foreign Language Skills: Does It Work?. Retrieved from https://files.eric.ed.gov/fulltext/ED396569.pdf
- Bourke, R., & Mentis, M. (2007). Self-assessment as a lens for learning. In The SAGE Handbook of Special Education, (pp. 319-330). Retrieved from https://sk.sagepub.com/reference/hdbk\_specialedu
- Bourke, R., & Mentis, M. (2013). Self-assessment as a process for inclusion. International Journal of Inclusive Education, 17(8), 854-867. doi:10.1080/13603116.2011.602288
- Brown, J. D., & Hudson, T. (1998). The alternatives in language assessment: Advantages and Disadvantages. TESOL quarterly, 16(2), 79-103. Retrieved from http://hdl.handle.net/10125/40791
- Brown, G., & Harris, L. R. (2014). The future of self-assessment in classroom practice: Reframing self-assessment as a core competency. Frontline Learning Research, 2(1), 22-30. doi: 10.14786/flr.v2i1.24

- Dann R. (1996). Pupil self-assessment in the primary classroom, Education 3-13, 24(3), 55-59. doi:10.1080/03004279685200321
- Frey, B. B., Schmitt, V. L., & Allen, J. P. (2012). Defining authentic classroom assessment. Practical assessment, research & evaluation, 17(2), 1-18. Retrieved from http://pareonline.net/getvn.asp?v=17&n=2
- Harris, L. R., & Brown, G. T. L. (2013). Opportunities and obstacles to consider when using peer- and selfassessment to improve student learning: Case studies into teachers' implementation. Teaching and Teacher Education, 36(2013), 101–111. doi: 10.1016/j.tate.2013.07.008
- Harrison, K., O'Hara, J., & McNAMARA, G. (2015). Re-Thinking Assessment: Self-and Peer-Assessment as Drivers of Self-Direction in Learning. Eurasian Journal of Educational Research, 60(2015), 75-88. doi: 10.14689/ejer.2015.60.5
- Hawe, E., & Parr, J. (2014). Assessment for learning in the writing classroom: An incomplete realisation. Curriculum journal, 25(2), 210-237. doi: 10.1080/09585176.2013.862172
- Ioannidis, N. (2013). The student's assessment in elementary school. Athens: Ostria Publications.
- Javaherbakhsh, M. R. (2010). The Impact of Self-Assessment on Iranian EFL Learners' Writing Skill. English Language Teaching, 3(2), 213-218. doi:10.5539/elt.v3n2p213
- Joyce, C., Spiller, L. and Twist, J. (2009). Self-assessment: What teachers think. Retrieved from https://www.researchgate.net/profile/Chris\_Joyce3/publication/242480135\_Selfassessment\_What\_Teachers\_Think/links/551cb5280cf20d5fbde55996.pdf
- Kostova, Z., & Atasoy, E. (2009). Comparative assessment and self-assessment of students' environmental knowledge in Bulgaria and Turkey. Bulgarian Journal of Science and Education Policy, 3(1), 49-67. Retrieved from http://bjsep.org/getfile.php?id=52
- Little, D., Perclová, R., & de l'Europe, C. (2001). The European Language Portfolio: a guide for teachers and teacher trainers. Retrieved from https://rm.coe.int/1680459fa6
- Liu, H., & Brantmeier, C. (2019). "I know English": Self-assessment of foreign language reading and writing abilities among young Chinese learners of English. System, 80(2019), 60-72. doi:10.1016/j.system.2018.10.013
- McMillan, J. H., & Hearn, J. (2008). Student self-assessment: The key to stronger student motivation and higher achievement. Educational Horizons, 87(1), 40-49. Retrieved from https://files.eric.ed.gov/fulltext/EJ815370.pdf
- Noonan, B., & Duncan, C. R. (2005). Peer and self-assessment in high schools. Practical assessment, research and evaluation, 10(17), 1-8. Retrieved from https://pareonline.net/getvn.asp?v=10&n=17
- OECD (2013). Reviews of Evaluation and Assessment in Education Synergies for Better Learning. Paris: OECD Publishing.
- Panadero, E., Tapia, J. A., & Huertas, J. A. (2012). Rubrics and self-assessment scripts effects on self-regulation, learning and self-efficacy in secondary education. Learning and individual differences, 22(6), 806-813. doi:10.1016/j.lindif.2012.04.007
- Paris, S. G. & Paris, A. H. (2001) Classroom applications of research on self-regulated learning. Educational Psychologist, 36(2), 89–101. doi: 10.1207/S15326985EP3602\_4
- Perumanathan, P. S. (2014). Formative assessment and feedback in the primary classroom: An interplay between teachers' beliefs and practices (Doctoral thesis). Victoria University of Wellington, New Zealand.
- Rolheiser, C., & Ross, J. A. (2001). Student self-evaluation: What research says and what practice shows. Retrieved from

http://csimmonds.pbworks.com/w/file/fetch/118283790/Student%20Self%20Evaluation%20What%20Re search%20Says%20and%20What%20Practice%20Shows.pdf

- Ross, J.A., Hogaboam-Gray, A., & Rolheiser, C. (2002). Student self-evaluation in grade 5-6 mathematics: Effects on problem-solving achievement. Educational Assessment, 8(1), 43-59. doi:10.1207/S15326977EA0801\_03
- Ross, J. A., & Starling, M. (2008). Self-assessment in a technology-supported environment: the case of grade 9 geography. Assessment in Education: Principles, Policy & Practice, 15(2), 183-199. doi: 10.1080/09695940802164218
- Sebba, J., Crick, R. D., Yu, G., Lawson, H., Harlen, W., & Durant, K. (2008). Systematic review of research evidence of the impact on students in secondary schools of self and peer assessment. Retrieved from https://ora.ox.ac.uk/objects/uuid:f5df1fd5-2bcb-47b1-8226b38ba2431019/download\_file?safe\_filename=Self%2BAssessment%2Breport.pdf&file\_format=application %2Fpdf&type\_of\_work=Report

- Stallings, V., & Tascoine, C. (1996). Student Self-Assessment and Self-Evaluation. The Mathematics Teacher, 89(7), 548-554. Retrieved from http://www.jstor.org/stable/27969906
- Towler, L., & Broadfoot, P. (1992). Self-assessment in the primary school. Educational Review, 44(2), 137-151. doi:10.1080/0013191920440203
- Weisi, H., & Karimi, M. N. (2013). The effect of self-assessment among Iranian EFL learners. Procedia-Social and Behavioral Sciences, 70(2013), 731-737. doi: 10.1016/j.sbspro.2013.01.117
- Wride, M. (2017). Assessment: Guide to Self-Assessment. Retrieved from https://www.tcd.ie/CAPSL/assets/pdf/Academic%20Practice%20Resources/Guide%20to%20Student%2 0Self%20Assessment.pdf
- Yan, Z., & Brown, G. T. (2017). A cyclical self-assessment process: towards a model of how students engage in selfassessment. Assessment & Evaluation in Higher Education, 42(8), 1247-1262. doi: 10.1080/02602938.2016.1260091
- Yan, Z. (2018). Student self-assessment practices: the role of gender, school level and goal orientation. Assessment in Education: Principles, Policy & Practice, 25(2), 183-199. doi: 10.1080/0969594X.2016.1218324