Teaching-learning Practical Wisdom (Phronesis) in Administration: A Systematic Review

Ensino-aprendizagem da Sabedoria Prática (Phronesis) em Administração: Uma Revisão Sistemática

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Resumo

O objetivo dessa revisão sistemática é investigar de que maneira o conceito da phronesis é relacionado à educação, ensino e aprendizagem na área de Administração e de estudos organizacionais. A phronesis é definida como sabedoria prática, ou prudência, presente em processos de deliberação, decisão e ação. A busca por artigos nas bases Scopus, Ebsco e Web of Science encontrou 37 artigos sobre o tema. A análise desses trabalhos revela os autores mais referenciados, as principais definições e os principais temas de pesquisas a respeito do ensino e aprendizagem em Administração. Ela é abordada segundo cinco principais definições: (a) disposição para o julgamento ou deliberação; (b) percepção do contexto e da situação real; (c) tipo de conhecimento prático; (d) phronetic social science; e, (e) múltiplas definições. Os temas encontrados abordam: (a) ensino e currículo relacionados à Administração e à ética empresarial; (b) educação e ensino de professores; (c) ensino e elementos da phronesis; (d) filosofia da educação e phronesis; (e) profissões e outros cursos superiores; e, (f) educação infantil. Suas relações com as virtudes morais poderia ser mais explorada, pois predominam definições relacionadas à aprendizagem experiencial. Estudos futuros poderiam discutir as práticas, praxis, e abordagens voltadas para ação.

Palavras-chave: phronesis, sabedoria prática, administração, ensino, aprendizagem.

Abstract

The purpose of this systematic review is to investigate how the concept of phronesis is related to education, teaching and learning in the area of Administration and organizational studies. Phronesis is defined as practical wisdom, or prudence, present in processes of deliberation, decision and action. The search for articles on Scopus, Ebsco and Web of Science found 37 articles on the subject. The analysis of these works reveals the most referenced authors, the main definitions and the main research topics regarding teaching and learning in Administration. It is approached according to five main definitions: (a) disposition for judgment or deliberation; (b) perception of context and real situation; (c) type of practical knowledge; (d) phronetic social science, and, (e) multiple definitions. The themes are: (a) Teaching and curriculum related to Administration and business ethics; (b) teacher education and training; (c) teaching and elements of phronesis; (d) philosophy of education and phronesis; (e) occupations and other higher education; and, (f) early childhood education. Its relationship with the moral virtues could be more explored, since definitions related to experiential learning predominate. Future studies could discuss practices, praxis, and action-oriented approaches.

Keywords: phronesis, practical wisdom, administration, teaching, learning.

JEL Code: Y80, A14, D83.
Introdução

Organizational reality involves situations in which people need to judge different courses of action, decide on the path to take and act on that decision. Knowing how to act requires a form of wisdom, which since ancient philosophy is known as phronesis. The intellectual virtue of phronesis – better known as practical wisdom, prudence, or wisdom – is the theme of this work.

The study of virtue ethics in the field of organizational studies has intensified in the last decades (Alzola, 2015; Ferrero & Sison, 2014), and so has the virtue of practical wisdom (Bachmann, Habisch, & Dierksmeier, 2018). These studies tend to approach phronesis as a fundamental element, originated from the works of western and eastern philosophers. The concept is a topic studied in several fields of knowledge, which allows the science of administration to reconcile contributions from different areas, as observed in work by Bachmann, Habisch, and Dierksmeier (2018).

One of the challenges shared by the fields of education and administration is teaching and learning phronesis. The areas of moral education and character education have shown significant advances on this issue. Although the importance of the topic in administration and organizational studies is evident, the knowledge about teaching and learning phronesis is still not well gathered. One reason for this is the different ways the concept’s interpretations echo throughout the field of administration studies.

Therefore, the research question guiding this work is: how has phronesis been discussed when it comes to education, teaching, and learning in administration and organizational studies? Answering this question can shed light on possible teaching and learning methods, the experiences of teachers and researchers who seek to enhance this virtue for future professionals in the field, as well as improving institutional and political aspects.

The interdisciplinary discussion on practical wisdom carried out by Bachmann et al. (2018) is an essential reference for this study. We aim to follow the authors’ contribution insofar as focusing on the concept of phronesis based on the western root, deepening the understanding of teaching and learning phronesis in the fields of administration and organizational studies. The article discusses research gaps and gathers concepts, research topics, methods, and primary references and journals. The selection and analysis of the studies examined through systematic review follow the Preferred Reporting Items for Systematic Reviews and Meta-analyses: the PRISMA Statement, by Moher, Liberati, Tetzlaff, Altman (2009).

The article is organized in six sections including this introduction. The next section presents the methodology adopted in the systematic review, followed by the third part of the article that introduces the definitions of phronesis, based on the contributions of the studies reviewed. The fourth section shows the bibliometric results and the fifth presents the primary references and emergent themes observed in the research. Finally, we reflect on the findings of this review, discuss its implications for teaching in the field of administration, and present suggestions for future research.

Methodology

The research question on the discussion of phronesis related to education, teaching, and learning, led to a systematic review of the literature, which allows a planned selection of works on the topic through explicit and replicable search, selection, and analysis methods (Mendes-Da-Silva, 2019). Among the several types of literature reviews found in work by Parê, Trudel, Jaana, and Kitsiou (2015), this study resembles the theoretical review type, mainly because we propose a comprehensive and expanded scope, and adopt a thematic content analysis as well as an interpretative analysis of the findings.
The most significant literature reviews carried out on phronesis are the quantitative-bibliometric study on virtue ethics by Ferrero and Sison (2014), and the study by Bachmann et al. (2018), who adopt an interdisciplinary approach about the construct practical wisdom. In order to synthesize the literature on teaching and learning practical wisdom (phronesis) in administration and contribute to form a research agenda (Mendes-Da-Silva, 2019), we will adopt recommendations from the PRISMA model (Moher, Liberati, Tetzlaff, & Altman, 2009), especially the criteria of eligibility, analysis, and research reporting applicable to systematic reviews.

The first four items recommended by Moher et al. (2009) refer to identification in the title, structured abstract (in this case, adapted to the journals’ guidelines), and introduction of the article containing the justification for the review and the statement of objectives.

Other recommendations involve twelve items on methods, five on results, three on discussion, and one item on funding. Regarding the method, we did not register a research protocol, but adopted eligibility criteria, sources of information, search strategy, selection of studies, data collection process, data list, risk of bias in studies, summarization measures, synthesis of the results, risk of bias between studies, and additional analyzes, according to Moher et al. (2009).

The eligibility criteria are:

- Type of study: the references to be selected should access the term phronesis present in works on administration and/or organizations and deal with education, teaching, and learning. As an exclusion criterion, the sample excludes works relating phronesis to other areas such as medical, law, and theology;
- Topic: the researchers read the title and abstracts to identify and select the works, observing the keywords and the scientific journal’s nature;
- Research design: theoretical and empirical studies that address education, teaching, and learning phronesis in the fields of administration or organizations are eligible;
- Time and language: there was no restriction regarding the period of the studies as eligibility criteria. As for language, the eligible studies were the ones produced in English, Spanish, or Portuguese;
- Status of the publication: scientific articles published in journals or book chapters are eligible.

As for the sources of information, we started with a comprehensive search in the electronic databases Ebsco, Scopus, and Web of Science, in December 2016. The search strategy consisted of using the query (phronesis) AND (organization* OR administration OR business*), searching the entire content of the article regardless of the period when the study was published. The references found were exported to Endnote 7, from where we applied the other selection procedures. The search resulted in 106 studies in Scopus, 95 in Ebsco and 53 in the Web of Science. In this list of 254 studies, 206 were not duplicates.

In the selection of the studies, we read the 206 studies observing the eligibility criteria, reducing the base to 128. Works from other areas, written in languages other than English, Spanish, or Portuguese, or out of the status covered by the criteria (reports, for instance) were excluded. We managed to access the complete content of 120 out of the total 128 studies, and organized these works in four categories, created based on the information collected during the research: conceptual (16 studies); methodology and science (14); organizations (53 studies, including a study in progress); and education, teaching, and learning (37). Therefore, we selected 37 works that specifically addressed the topic of education, teaching, and learning of phronesis, listed in the appendix of this study. Figure 1 shows the flow of the selection process.
For data extraction and listing, we exported the sample to an analysis matrix in Excel, in which we collected: authors, year, title, journal, keywords, central theme, primary definition for phronesis, research type (theoretical or empirical), research strategy, main references, and country of university affiliation. To assess the risk of bias in each study, we observed the country, the research type and strategy, and the most used definitions and references. These elements clarify the different theoretical perspectives, contribute to point out the countries where the theme has the potential to grow, as well as the research approaches that can be promoted.

Finally, to summarize and synthesize the results, we quantified the production of theoretical and empirical papers, per journal over the years, the number of researchers, the number of countries (country of the university the authors are affiliated with), the number of times the prominent authors were cited, number of keywords, and number of theoretical and empirical studies of each theme.

The 37 selected studies discuss issues such as interventions in undergraduate and graduate courses in business or administration schools and address teacher and, above all, student training. The next section presents the primary definitions of phronesis.

**Definition of phronesis in the selected studies**

This section analyzes the definitions of phronesis and the main references cited in the studies selected. The concepts are presented in this section, chronologically, to show the main interpretations and elements, considering the philosophical roots of the theme, systematized primarily from Aristotle
Prudence – or the art of making right decisions – was reinterpreted by thinkers such as Thomas Aquinas (2005/2014) and Alasdair MacIntyre (2007), who understood the significance and importance of such a virtue for moral action.

The analysis showed that phronesis has been discussed based on complementary aspects. The first interpretation recognizes this intellectual virtue as a type of practical knowledge of teacher and students. A second interpretation is based on the notion of the disposition for wise/correct/moral judgment in the face of certain situations. A third interpretation describes phronesis as the capacity to perceive the particular context and situations and, in this case, the concept is correlated with the experiential form of teaching and learning. In addition to these three interpretations, phronesis appears as the research strategy called phronetic social science, proposed by Flyvbjerg (2001).

Different interpretations are reviewed by Kristjánsson (2005) and Noel (1999a). According to Noel (1999a), phronesis was translated by various terms and expressions in the English language: practical reasoning, practical wisdom, moral discernment, moral insight, and prudence. These concepts are approached by trends of thought that stress one or other of its facets: (a) rationality; (b) perception and insight of the situation; and (c) the phronimos’ (person who exercises phronesis) morality and ethical and moral character. In teaching, the rational or syllogistic perspective of phronesis has developed theories about the practical argument that the teacher can develop as competence. The authors who consider phronesis based on the situational aspect, i.e., as an ability to perceive the particular context of situations, adopt concepts related to practical perception, discrimination as a meaning of perception, discernment, and insight.

On the other hand, Kristjánsson (2005) argues that three neo-Aristotelian currents in the area of education are more distant from Aristotle’s notions. The first of these three currents is the ethos perspective, which evolved in Germany and received criticism from the Habermasian current. According to the author, this first current lacked Aristotelian notions such as telos and logos. In the 1980s and 1990s, the second trend of thought appears, known as logos perspective. For this current, practical syllogisms could improve reasoning processes. Finally, two authors in particular – Joseph Dunne and Wilfred Carr – represent the third current pointed out by Kristjánsson (2005), the phronesis-praxis perspective (PPP). Kristjánsson (2005) argues that this third current establishes an anti-method and anti-theory approach, emphasizing the practice. However, the author believes that there is room for method and theory in education, as long as they are inserted into practice and related to a local context. According to Kristjánsson (2005, p. 464), “this intellectual virtue helps the moral (character) virtues find their right ends and the suitable means to their ends.”

During the analysis, we tried to identify the notion of phronesis that was predominant in each study. In order to organize the several notions identified, we divided the studies into five groups according to the similarity among the definitions, as presented in Table 1. The definitions were classified as (a) disposition for judgment or deliberation; (b) perception of the context or situation; (c) type of practical knowledge; (d) phronetic social science; and, (e) multiple definitions.
Table 1

Studies Grouped According to the Primary Definition of Phronesis

<table>
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<tr>
<th>Definitions of phronesis</th>
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<tr>
<td>1 Disposition for judgment or deliberation</td>
<td>Maguire (1997); Gibbs and Angelides (2004); Clark (2005); Alexander (2006); Bishop and Rees (2007); Wivestad (2008); Davis (2012); Brown, Holtham, Rich and Dove (2015); Kupers and Pauleen (2015)</td>
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<td>2 Perception of the context or situation</td>
<td>Korthagen and Kessels (1999); Birmingham (2003); Hirst and Carr (2005); Tsang (2007); Berthrong (2008); Salite, Gedzune and Gedzune (2009); Gilkison, Giddings and Smythe (2015); Tyson (2015); Kassam, Avery and Ruelle (2016)</td>
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<td>3 Type of practical knowledge</td>
<td>Noel (1999b); Hartog and Frame (2004); Salminen-Karlsson and Wallgren (2008); Melville, Campbell, Fazio and Bartley (2012); Clegg, Jarvis and Pitsis (2013); Ramsey (2014); Marlow et al. (2015); Salloum (2016)</td>
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<tr>
<td>4 Phronetic social science</td>
<td>Cairns, Sliwa and Wright (2010); Bileišis (2012); Gibbs and Maguire (2012); Robbins (2013); Fougere, Solitaner and Young (2014); Lee (2015)</td>
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<tr>
<td>5 Multiple definitions</td>
<td>Noel (1999a); Kristjánsson (2005); Breier and Ralphps (2009), Karam, Sidani and Showail (2015); Kreber (2015)</td>
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</table>

Note. Source: Elaborated by the authors.

Among the studies, it is worth mentioning that the works by Noel (1999a) and Kristjánsson (2005), which discuss multiple perspectives – including the perspective of phronesis as phronetic social science that is recent (elaborated by Bent Flyvbjerg in 2001) – were included in the group multiple definitions. This group counted five studies.

In addition, the work by Berthrong (2008) differs from the others by approaching the notion of wisdom according to the Confucian philosophy, interpreted by the philosopher Zhu Xi. As this article understands phronesis as situated wisdom, we chose to include it in the group perception of context or situation.

The other studies follow Aristotelian notions or philosophers who interpreted Aristotle. The oldest work is the theoretical essay by Maguire (1997), which considers phronesis as the ability to “making good judgments in difficult situations” (p. 1412). It is an intellectual virtue supporting the exercise of the virtues of character. It is the ability to recognize situational differences that modify the way virtues are realized.

Maguire (1997) bases his work on Aristotle (2009), MacIntyre (2007) and Gadamer (2008). The author understands phronesis as balanced judgment, which depend on knowing principles and the situation experienced. The moral judgment does not start from knowing the moral principle and then applying the knowledge previously acquired but is determined by the situation and the principles.

Some studies distributed in the second group – perception of the context or situation – describe phronesis as a type of knowledge that involves the understanding of the context, the relationship between the theory and the teachers’ practice (Korthagen & Kessels, 1999). Other studies in the group consider phronesis, in the context of teachers’ training, as reflections about the situation (Birmingham, 2003; Gilkison, Giddings, & Smythe, 2015). Other concepts are phronesis as the ability to discern within the situations (Hirst & Carr, 2005); as a lifelong learning wisdom (Berthrong, 2008) that depends on insight (Salite, Gedžune, & Gedžune, 2009) and on wisdoms’ imaginative nature (Tyson, 2015); and phronesis as a wisdom based on practice, on local and particular space (Kassam, Avery, & Ruelle, 2016).

In the third group, phronesis is considered a type of practical knowledge (Hartog & Frame, 2004; Noel, 1999b), and moral knowledge (Marlow et al, 2015), which is manifested in the experience and learned in practice (Ramsey, 2014). Its function is to mediate the virtues and theoretical knowledge.
(Salloum, 2016), based on reflection and lived experience (Marlow et al., 2015). Phronesis, according to some studies in this group, has a particular and dialogical nature (Clegg, Jarvis, & Pitsis, 2013).

For the studies in the fourth group – phronetic social science, one of the characteristics of phronesis is the practical judgment in relationship with a specific context. Gibbs and Maguire (2012) developed a phronetic method for making research recommendations, considering persuasive narratives based on Aristotelian rhetoric, and articulating power relations and values – such as those proposed by Flyvbjerg (2001) – in order to effectively act and change a specific context. For Fougere et al. (2014), the phronetic approach toward education considers the norms as based on a context. The binomial action-change and the power relations are elements present in this concept. Teachers can help students be aware of the vocabulary they adopt and, by moral imagination, promote their enrichment. Robbins (2013) addresses the narrative and discursive tendency of social sciences, while Ramsey (2014) observes a tendency of social science toward the practice.

Finally, regarding the group formed around multiple definitions, in addition to Noel (1999a) and Kristjánsson (2005) mentioned before, Breier and Ralphs (2009) discuss phronesis in the context of the topic recognition of prior learning in adult education. The authors understand phronesis in two forms: as a type of reasoning and a type of knowledge. The work by Karam et al. (2015) discusses business education and the curriculum of business ethics. The author considers phronesis as practical wisdom to reflect and judge values, interests, and power dynamics. Kreber (2015) defines it as knowledge and ability to judge wisely, in a given particular situation. The author adds to the definition of the capacity to perform reflexive judgment and criticism.

Although we organized the studies in these five groups, they mostly stem from Aristotelian (and his interpreters) notions on phronesis, such as Thomas Aquinas (Aquino, 2005/2014), Gadamer (2008), MacIntyre (2007), among other philosophers. Therefore, the studies present nuances and elements that may be related to more groups, which show conceptual complementarity, corroborating the work of Bachmann et al. (2018).

**Bibliometric Results**

The 37 studies under analysis represent 29 scientific journals and 70 researchers, affiliated to universities in 19 countries. We did not choose to research in specific journals of business ethics or education. However, we can see that the discussion of phronesis related to education in administration is distributed by different problems and theoretical approaches. As a result, we identify theoretical perspectives and themes related to the study of phronesis.

After the first work by Maguire (1997), the number of studies in the sample varied from one to four, per year, until 2014. In 2015 alone, there is a sharp increase to eight studies.

Within a large number of journals (29) observed in the sample, only five published more than one study. The Journal of Business Ethics published three works (Fougere, Solitander, & Young, 2014; Hartog & Frame, 2004; Maguire, 1997). The journal Cultural Studies of Science Education recently published three works: the theoretical discussions by Lee (2015) and Salloum (2016) and the case study by Kassam et al. (2016). The work by Salloum (2016) discusses phronesis directly, addressing the practical knowledge of teachers.

The Journal of Philosophy of Education published three theoretical discussions. Noel (1999b) establishes a connection between phronesis, the role of fantasy and imagination, and teaching. Hirst and Carr (2005) discuss the philosophy of education and its relation to phronesis; that is, they consider theoretically, academically, and philosophically the social practices of education. Finally, Wivestad (2008) relates the concepts of phronesis and agape when studying early childhood education.
Finally, the journals Advances in Health Sciences Education and Educational Philosophy & Theory published two works each, while the other journals found in this systematic review published one study each. In our point of view, this is an indication of the diversity and shows the interest of different authors in discussing the theme, in different localities. We emphasize that all 37 studies were published in English, although the diversity of countries (identified by the authors’ university affiliation) is significant.

As for the country, 18 authors were affiliated to universities in the UK. The United States counted eight authors, followed by Australia and Denmark with five each; Canada, Lebanon, and New Zealand each with four authors; Netherlands, Latvia, and Sweden each with three authors; South Africa, Cyprus, and Finland with two authors each; and the other countries identified with one author each. There were no Latin American authors in the sample.

Regarding the research type, we categorized them as theoretical or empirical studies. Figure 2 shows the proportion of research types over the years.

![Figure 2](image)

**Figure 2.** Number of Theoretical and Empirical Research Per Year

Source: Elaborated by the authors.

Of the 37 studies of the sample, 15 are empirical, and 22 are theoretical works. The first empirical study is from 2003, which indicates that field research in this area recently started to be published. Figure 2 shows that the number of empirical researches intensified from 2008 with a peak in 2015.

As for research strategies, the empirical studies use the case study method (Brown, Holtham, Rich, & Dove, 2015; Fougere et al., 2014; Hartog & Frame, 2004; Kassam et al., 2016), action research (Ramsey, 2014; Salite et al., 2009), and mixed methods (Melville, Campbell, Fazio & Bartley, 2012).

In addition to these strategies, the authors used the following data collection and interpretation techniques: narrative analysis (Robbins, 2013), focus groups (Marlow et al., 2015), and interviews (Birmingham, 2003; Breier & Ralphs, 2009; Salminen-Karlsson & Wallgren, 2008).

A significant number of studies adopted the phronetic social science approach developed by Flyvbjerg (2001). This author was cited in seven empirical and five theoretical works, such as in the study by Cairns et al. (2010), who investigated education in international business using this phronetic social science.

Regarding the keywords, we maintain the records in English since the studies in the sample were written in this language. When there were no keywords, we identified the most important terms...
presented in the abstract, considering elements such as concepts, approaches, or fields of investigation. The review found 170 different keywords.

In addition to phronesis, occurring in 25 of the 37 articles, the most cited keywords were learning, education, Aristotle, ethics, teaching, business ethics, and practical wisdom. Figure 3 is a word cloud showing these and other keywords found.

The analysis of the keywords allows anticipating the main theoretical elements addressed, as well as analysis phenomena on the subject education, teaching, and learning in the field of administration. Another way to understand the trends on the theme is to analyze the most cited references among the studies of the sample.

Primary References and Emergent Themes

Aristotle’s (2009) definition of phronesis – especially that in the Nicomachean Ethics – is the predominant reference in the studies analyzed. The exceptions are Berthrong (2008) and Korthagen and Kessels (1999). In the area of education, the intellectual virtues of episteme, techne, and phronesis are discussed in relation to the knowledge that teaching and learning can provide. The concept of praxis appears connected to concepts involving experiential learning and the relevance of the perception of context and particular situations.

The main references include authors who build directly on Aristotle’s concept. For example, Gadamer (2008) is cited in works that consider phronesis as the capacity for interpretation associated with the understanding of tradition and experience. Gadamer’s (2008) concept of phronesis as moral knowledge is also cited, for example, by Hirst and Carr (2005), Maguire (1997), Marlow et al. (2015), Salloum (2016), and Wivestad (2008).

The philosopher Alasdair MacIntyre (2007), well known for his approach to virtue ethics, was cited in at least seven studies (Alexander, 2006; Kreber, 2015; Kristjánsson, 2005; Maguire, 1997; Noel, 1999a; Ramsey, 2014; Wivestad, 2008).

The work of Dunne (1993) was discussed and presented in the theoretical framework of several studies: Clark (2005), Kristjánsson (2005), Wivestad (2008), Cairns et al. (2010), Kreber (2015), Tyson 2015), and Salloum (2016). Dunne’s (1993) approach is related to phronesis as praxis.
Phronetic social science elaborated by Bent Flyvbjerg (2001) appears frequently. The author discusses phronesis as a type of knowledge in social science, adding the element of power to the Aristotelian concept.

Phronesis is connected to education in studies on recognition of prior learning, adult education, and experiential learning. Thus, some studies in the sample approach constructs related to values and reflexive postures resuming the work of John Dewey – cited by Birmingham (2003), Kupers and Pauleen (2015), Ramsey (2014), and Salite et al. (2009) – and that of Donald Schön, cited by Korthagen and Kessels (1999), Kreber (2015), and Tyson (2015).

When considering the most used references among the studies in the sample, it was possible to observe that the phronetic social science and the phronesis-praxis perspective, especially as developed by Flyvbjerg (2001) and Dunne (1993), resonated in the field discussions. The debate indicates counterpoints toward these approaches, such as observed in the work by Kristjánsson (2005) and in the study by Eikeland (2007), which was cited by Ramsey (2014).

Ramsey (2014) considers that Eikeland (2007) is persuasive when criticizing Flyvbjerg, stating that Flyvbjerg limits the understanding of phronesis by separating it from the techne and the work of Aristotle as a whole, as well as by not considering the interaction between knowledge, deliberation, and practice. Such findings indicate the importance of understanding the works of these contemporary authors in order to advance in the discussion of phronesis, especially in the field of administration.

Six main themes include phronesis as part of the theoretical framework or discuss it as a teaching and learning practice, as well as an element of the purpose of education. Table 2 presents the theoretical and empirical studies of each theme.

Table 2

<table>
<thead>
<tr>
<th>Themes</th>
<th>Number studies</th>
<th>Theoretical</th>
<th>Empirical</th>
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<tbody>
<tr>
<td>1. Teaching and curriculum related to administration and business ethics</td>
<td>11</td>
<td>Maguire (1997); Bileišis (2012); Davis (2012); Clegg et al. (2013); Karam et al. (2015); Kupers and Pauleen (2015)</td>
<td>Hartog and Frame (2004); Salminen-Karlsson and Wallgren (2008); Cairns et al. (2010); Fougere et al. (2014); Brown et al. (2015)</td>
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<tr>
<td>2. Teacher education and training</td>
<td>5</td>
<td>Korthagen and Kessels (1999); Tyson (2015); Salloum (2016)</td>
<td>Salite et al. (2009); Melville et al. (2012)</td>
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<tr>
<td>3. Teaching and elements of phronesis</td>
<td>8</td>
<td>Noel (1999b); Gibbs and Angelides (2004); Clark (2005); Kreber (2015)</td>
<td>Birmingham (2003); Breier and Ralphs (2009); Gibbs and Maguire (2012); Ramsey (2014)</td>
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<td>4. Philosophy of education and phronesis</td>
<td>5</td>
<td>Noel (1999a); Hirst and Carr (2005); Kristjánsson (2005); Alexander (2006); Berthrong (2008)</td>
<td>-</td>
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<tr>
<td>5. Professions and higher education</td>
<td>5</td>
<td>Bishop and Rees (2007); Tsang (2007)</td>
<td>Robbins (2013); Gilkison et al. (2015); Marlow et al. (2015)</td>
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**Note.** Source: Elaborated by the authors.

The theme teaching and curriculum related to administration and business ethics is found most often, present in 11 theoretical and empirical studies. It reinforces the concern that teaching phronesis requires practical-based learning or learning through experience (experiential approach). The relevance
of the theme, therefore, indicates that having theoretical knowledge is not enough and practical knowledge learned by experience is fundamental.

In this part of the analysis, we examine each of these central themes, in an attempt to relate them to some of the concerns about teaching and learning in the field of administration. Among these concerns, the study of phronesis inspires questions about the type of knowledge developed in the field of administration in the country, or about rationality and decision making, on teaching ethics and the distance between theory and practice, judgment and action.

The type of knowledge in administration involving episteme, techne, and phronesis (Kavanagh, 2013) is discussed by Koike and Mattos (2001), who stated that phronesis as practical knowledge, needs to be revisited in the field of administration. Azevedo and Grave (2014) are also engaged in this discussion, even though indirectly when debating the essence of administration – defined as a virtuous action performed through virtues. As observed in the study by Kavanagh (2013), such works recognize the importance of practical or prudent wisdom (Mattos, 2009).

The issue of the distance between theory and practice in teaching administration is found in many debates. Silva, Lima, Sonaglio, and Godoi (2012) discuss this issue, also debating about learning processes that are not significant for students. The definitions of phronesis presented in Table 1 define personal postures, whether of teachers or students. The concepts also define the practical knowledge learned through experiences and practical approaches, which can be subsumed in action-learning methodologies, connecting theory and practice. Teaching this virtue – taking into consideration the deliberation, judgment, decision-making and action processes – requires reflections on lived experiences (Mintzberg & Gosling, 2003) in order to achieve more meaningful actions. Learning this virtue, on the other hand, relies on the student will. Therefore, the teaching and learning process depends on an agreement between the teacher and students to occur.

Is it possible to learn practical wisdom? Based on these studies, we argue that soul-searching, daily reflection on our actions, and the development of imagination, judgment, and moral decisions, are possible paths to learn practical wisdom.

The analysis of the studies in this systematic review allows inferring that the main contributions made so far may improve the teaching and learning in administration in two ways. The first way considers administration as knowing about practices to be able to implement them (Hurst, 2012) based on morally good ends (Aristotle, 2009). Thus, it is possible to contemplate teaching administrative tools in a context of responsibility and respect for human dignity. The second way is teaching undergraduate students ethics and the development attitudes using phronesis as an alternative, within the perspective of virtue ethics.

Teaching and curriculum related to administration and business ethics

Within each theme, we will briefly present the main subject of the articles and discuss those considered more relevant. We found six theoretical and five empirical studies in this first theme. Salminen-Karlsson and Wallgren (2008) address the cooperation and transfer of knowledge in partnerships between the industry and undergraduate schools specialized in industrial research. Cairns et al. (2010) discuss critical pedagogy in the area of international business. Davis (2012) studies teaching the ethics of professions. Clegg et al. (2013) examine the role of the business and ethics school, and the strategy based on phronesis; Karam et al. (2015), studied meaningful learning, practical wisdom, and reflection. Finally, Kupers and Pauleen (2015) discuss habit, improvisation, and transformative learning.

Maguire (1997) examines two different approaches to teaching business ethics, one political and the other based on virtue ethics. According to the political approach, institutions should be discussed based on distributive justice, whereas according to virtue ethics, they should be discussed based on the character and responsibilities of people in the organizations. The author suggests the use of Gadamer’s (2008) interpretation of phronesis in order to understand the bidirectional interrelation between politics and virtues. The approaches do not diverge in the definition of administration and corroborate the
concept that was later defended by Azevedo and Grave (2014). The concept of administration, in this case, involves politics, management, and leadership, and is defined as a virtuous action, to contribute to the good life (eudaimonia).

In addition to moral understanding, Hartog and Frame (2004) discuss a strategy to include teaching business ethics in the curriculum of business/management courses. They elaborate five dimensions based on work experience, one of them based on the notion of phronesis. Evidence of the importance that students attribute to the teaching of ethics in administration suggests that teaching should permeate the curriculum and that there is a need for more participatory methods, in a favorable environment (Ferreira, Ferreira, & Faria, 2011).

Teacher education and training

Five articles in the sample discuss teacher education. Korthagen and Kessels (1999), Tyson (2015), and Salloum (2016) theorize about teacher education and phronesis. The other two studies – Salite et al. (2009) and Melville et al. (2012) – are empirical research works on the theme.

Korthagen and Kessels (1999) discuss the relationship theory-practice and episteme-phronesis in training teacher-researchers. The authors adopt the notion of knowledge based on episteme and phronesis. They debate a broader approach, which uncovers the relationship between teachers’ cognition and behavior. They suggest a realistic approach to teacher education and reflect on the role of the teacher-educator and the consequences for organizations.

For Salloum (2016), the teachers’ practical knowledge is based on the intellectual virtue of phronesis. The author supports a virtue-based epistemology, such as sobriety, perseverance, justice, and humility. In the author’s reflection, teachers and students can engage in a more significant search for knowledge, since they include in this endeavor some virtues such as intellectual honesty and responsibility. The author outlines a scenario with different scientific practices and shows the virtues that are necessary for their adequate implementation.

Salite et al. (2009) discuss the different types of action research in education, especially in the study of teacher education. They seek to observe phronesis and its different characteristics as a process of action research. The authors start from the idea of phronesis as the wisdom of insight, which consists of an “ability to use past experience for evaluation of specifics problems situations in the present in order to make ethical decisions about the required course of action that would promote the collective good” (Salite et al., 2009, p. 16). The notion of practical wisdom briefly describes the action-research process.

An additional element to consider is the daily practice of teachers, who by practical wisdom prepare future teachers. Melville et al. (2012) consider the science of teaching as a dialogue between episteme, techne, and phronesis. The script of an academic department offering a course, therefore, needs to be translated into three forms of knowledge: theoretical, production, and practical.

Teaching and elements of phronesis

Eight works discuss teaching and learning from an element corresponding to phronesis. Noel (1999b), Gibbs and Angelides (2004), Clark (2005), and Kreber (2015) make theoretical reflections and discuss the themes fantasy or imagination, experiential learning, action and reflection, and reflexive criticism.

Noel (1999a, 1999b) states that fantasy or imagination is an interpretive ability to reproduce images. It goes beyond the perception of context and is related to discernment. This, in turn, represents a broader capacity to grasp how the situation appears or presents/re-presents for the person. The author argues that fantasy plays a crucial role in the process of practical reasoning insofar as it helps to imagine and select ends and means.
Gibbs and Angelides (2004) follow the definition of experiential learning or wisdom by the human condition of being in the world, based on Heideggerian thought. According to the authors, the phronimos is the person who knows and is wise, more than just having knowledge. Related to work and professions, it is about a skill that goes beyond know-how, it is about acting and being. However, it is necessary to relearn how to think, due to the predominance of the techno-scientific way of thinking.

Clark (2005) investigates educational research and its different trends. The author discusses two characteristics of phronesis: action and reflection. Action is characteristic of the practical wisdom of the person who can deliberate on what is good and necessary for themselves, about the kind of thing that leads to a good life. Phronimos knows how to act well.

Kreber (2015) discusses the practice of knowing to teach. Teaching and learning are activities or practices in which we engage. They are part of the tradition and patterns established by the community and are manifested in a reflexive and critical questioning of the context in which we operate, in order to support the students’ interests. Thus, it is about helping students in their interests, if the interests are the ones desired by the community.

We found four studies that carried out field research to understand the elements of phronesis (Table 3).

### Table 3

**Empirical Works that Approach Elements of Phronesis**

<table>
<thead>
<tr>
<th>Author</th>
<th>Research method</th>
<th>Definition of phronesis</th>
<th>Theme/element</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breier and Ralphs (2009)</td>
<td>Analysis of qualitative data of two research projects</td>
<td>Reasoning and type of knowledge</td>
<td>Recognizing previous learning</td>
</tr>
<tr>
<td>Gibbs and Maguire (2012)</td>
<td>Analysis of 20 (twenty) professional doctoral theses</td>
<td>Phronetic social science</td>
<td>Rhetoric and phronesis in recommending scientific research</td>
</tr>
<tr>
<td>Ramsey (2014)</td>
<td>Action-research project</td>
<td>Type of knowledge learned in practice</td>
<td>Attention in the interactions and day-to-day organizational practices</td>
</tr>
</tbody>
</table>

**Note.** Source: Elaborated by the authors.

Ramsey (2014) presents three approaches in the schools, based on practices. The author focuses on the element attention as the primary cognitive activity to relate ideas, practice, and context. The author illustrates learning with her experience in 30-month participation in a research project and, from this learning practice, she can extract three domains of attention, (a) engagement with ideas, (b) a practice of inquire, and (c) a navigation of relations. She proposes these three findings as the scholarship of practice.

**Philosophy of education and phronesis**

In this theme, we include the works on phronesis in the field of philosophy of education. Noel (1999a), Hirst and Carr (2005), Kristjánsson (2005) (his analysis of three perspectives is described in the section on phronesis definitions), Alexander (2006), and Berthrong (2008) provide theoretical discussions on this theme. These works are published in journals that address the philosophy of education, such as the Journal of Philosophy of Education, Educational Philosophy & Theory, and Studies in Philosophy & Education.
Noel (1999a) discusses the different interpretations of phronesis for teaching. He distinguishes between the approaches on rationality, perception and insight, moral character, and discernment.

Hirst and Carr (2005) discuss their approaches and argue that the philosophy of education is a social practice that considers the assumptions, concepts, and justifications for educational practice. They reject the approach that theoretical philosophy should be replaced by a practical philosophy.

For Alexander (2006), one must understand the distinction between pure reason and practical wisdom or phronesis. In the tradition of virtues, the most important is the search for meaning, for the meaning of life. Particularly in the case of special education, the author discusses how neo-Aristotelianism deals with spirituality.

The work of Berthrong (2008), published in the book Teaching for Wisdom, discusses practical wisdom and virtues based on the thinking of the Chinese philosopher Zhu Xi, interpreter of Confucius. The author considers the interpretation of Master Zhu as a virtue of wisdom or discernment (Zhi). The five cardinal virtues that have been maintained over more than two thousand years after Confucius’ first reflections are humanity, justice, civility or ritual, faithfulness, and zhi or wisdom. The telos or goal of updating the five virtues through research is to become the junzi, i.e., an exemplary person.

Professions and higher education

Two theoretical discussions and three empirical research works were found related to the teaching and learning of professions. The work by Bishop and Rees (2007), Gilkison et al. (2015), and Marlow et al. (2015) discuss phronesis in medical professions. There are studies on teaching and learning in social work (Tsang, 2007), and in social policy (Robbins, 2013).

The article by Marlow et al. (2015) presents the first phase of a research project in the nursing area, which aims to promote phronesis in the classroom. It also aims to promote dialogue and discussion about ethical knowledge among nursing students and previously incarcerated adults. It is based on Gadamer’s (2008) philosophy and the Socratic dialectic. It is a research project that follows a critical and alternative approach and seeks to create opportunities for reflection on the context, by giving priority to practical wisdom in the face of epistemological knowledge.

Although Marlow et al. (2015) discuss the theme in other professions, we believe that analyzing initiatives in other areas (such as social work, for instance) can contribute to the development of future teaching and learning proposals in the area of administration.

Early childhood education

The sample presented some works on children education and practical knowledge. Although children are not the focus for this study, the definitions of phronesis and the teaching and learning experiences may contribute to understanding educational practices in administration. Also, such studies involve issues related to the public field, such as local knowledge that comes from children’s experience and reality (Kassam et al., 2016), and the discussion of the phronetic social science (Lee, 2015). In addition to these two authors, Wivestad’s (2008) work lists the concepts of agape and phronesis.

Kassam et al. (2016) discuss the knowledge of children living in rural areas, particularly indigenous children, and study two North American cases. They recognize the need for diversity and knowledge and suggest a pluralistic pedagogy that encompasses multiple knowledge sources.
Final considerations

This article aimed to explore how phronesis has been discussed about education, teaching, and learning in administration, based on a systematic review of the publications in the area. The research found the primary references used in the literature on practical wisdom. Aristotle (2009) remains the philosopher most associated with the concept of phronesis and moral virtues. The study observed that contemporary authors – such as Gadamer (2008), MacIntyre (2007), and Flyvbjerg (2001) – are recognized and their concepts resonated in more recent studies. As an example, Ferrero and Sison (2014), in their bibliometric analysis of virtue ethics, found Aristotelian approaches supported on the work by MacIntyre (2007) and other authors. We believe, therefore, that it is necessary to study such studies in depth in order to continue the study of phronesis.

The definitions attributed to phronesis were associated with Aristotelian concepts, adopting different but complementary elements or analytical emphasis. Phronesis was approached according to five definitions: (a) disposition for judgment or deliberation; (b) perception of context and situation; (c) type of practical knowledge; (d) phronetic social science; and, (e) multiple concepts. Based on the findings in this systematic review – particularly the recurrence in the use of the approach – we suggest adding phronetic social science as a new conceptual perspective, enriching the results obtained in the reviews carried out by Maguire (1997) and Kristjánsson (2005).

The bibliometric data showed the participation of 70 researchers, affiliated to universities based in 18 different countries, in the studies analyzed in this systematic review. The diversity of scientific journals was also significant, indicating the predominance of North American and European research. In addition, the interpretation after full reading, the keywords, and the references helped to analyze the concepts of phronesis and the themes analyzed in the studies. We gathered articles on six themes: (a) teaching and curriculum related to administration and business ethics; (b) teacher education and training; (c) teaching and elements of phronesis; (d) philosophy of education and phronesis; (e) professions and higher education; and (f) early childhood education.

In terms of the concept of phronesis applied to the field of administration, we share the concerns raised by Ramsey (2014) and Kristjánsson (2005) about the concepts of phronesis and its foundation in Aristotle’s (2009) philosophy. The definitions attributed to phronesis reveals elements (reflection, imagination, learning, and mediation experience or function between knowledge and virtues) or emphasize the process of how phronesis is exercised, such as judgment, attention, and action. On the other hand, from a moral point of view, prudence in Aristotle (2009) is directly related to the worldview and is considered a metaphysically founded virtue (Albenque, 1963/2008). In this sense, Albenque (1963/2008) recommends working on understanding the structures more than the processes or operation. The interpretation and analysis of elements such as fantasy or imagination and the symbolic structure through which we interact with the world may be the correct way to exercise phronesis while acting as researchers. Revisiting the notion of praxis and associated concepts, such as experience, deliberation, and contingency, may help in this process.

For the teaching of ethics in administration, we suggest that teaching and learning of phronesis is a fundamental aspect for the accomplishment of good deliberative processes, judgments, choices, and actions. Helping students understand the context of action and act on moral principles requires a form of learning based on the experience of judgment, decision, and dialogue with those involved, which can be exercised in the various disciplines of a school curriculum, as well as in the practices of daily life.

We recognize the limitations of this study when working with a restricted sample of articles related to education, teaching, and learning within the fields of administration and organizational studies. A future interdisciplinary review could cover the teaching and learning of phronesis in other areas, and consult other sources of data such as books, theses, and dissertations.
Future research could address the relationship of phronesis with moral virtues since the works analyzed here relate the concept to experiential learning and to develop practical knowledge. Some questions arising from this research and that may guide future research are how do we learn practical wisdom without prior experience? How are decisions made wisely in a new or problematic situation and condition? How is the example of the phronimos apprehended by the other people in their environment? These and other issues are possibilities for theoretical and empirical investigations at this intersection between the fields of education, administration, and ethics.

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Contributions
1st author: Conducted the systematic literature review and contributed to the analysis and writing of the article resulting from the research.

2nd author: Oriented the research and contributed to the analysis and writing of the article.

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## APPENDIX

**Studies of the Sample, in Chronological Order**

<table>
<thead>
<tr>
<th>N°</th>
<th>AUTHOR</th>
<th>YEAR</th>
<th>TITLE</th>
<th>JOURNAL</th>
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<tr>
<td>1</td>
<td>Maguire, S.</td>
<td>1997</td>
<td>Business ethics: A compromise between politics and virtue</td>
<td>Journal of Business Ethics</td>
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<td>3</td>
<td>Noel, J.</td>
<td>1999</td>
<td>On the Varieties of Phronesis</td>
<td>Educational Philosophy &amp; Theory</td>
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<tr>
<td>4</td>
<td>Noel, J.</td>
<td>1999</td>
<td>Phronesis and Phantasia: Teaching with Wisdom and Imagination</td>
<td>Journal of Philosophy of Education</td>
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<td>5</td>
<td>Birmingham, C.</td>
<td>2003</td>
<td>Practicing the Virtue of Reflection in an Unfamiliar Cultural Context</td>
<td>Theory Into Practice</td>
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<td>8</td>
<td>Clark, C.</td>
<td>2005</td>
<td>The structure of educational research</td>
<td>British Educational Research Journal</td>
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<td>10</td>
<td>Kristjánsson, K.</td>
<td>2005</td>
<td>Smoothing It: Some Aristotelian misgivings about the phronesis-praxis perspective on education</td>
<td>Educational Philosophy &amp; Theory</td>
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<td>11</td>
<td>Alexander, H.</td>
<td>2006</td>
<td>Spirituality, morality, and criticism in education: a response to Kevin Gary</td>
<td>Studies in Philosophy &amp; Education</td>
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<td>Bishop, J. P. and Rees, C. E.</td>
<td>2007</td>
<td>Hero or has-been: Is there a future for altruism in medical education?</td>
<td>Advances in Health Sciences Education</td>
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<td>2007</td>
<td>Reflection as dialogue</td>
<td>British Journal of Social Work</td>
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<td>15</td>
<td>Wivestad, S. M.</td>
<td>2008</td>
<td>The Educational Challenges of Agape and Phronesis</td>
<td>Journal of Philosophy of Education</td>
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<td>17</td>
<td>Breier, M. and Ralphs, A.</td>
<td>2009</td>
<td>In search of phronesis: recognizing practical wisdom in the Recognition (Assessment) of Prior Learning</td>
<td>British Journal of Sociology of Education</td>
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<td>18</td>
<td>Salite, I., Gedžune, G. and Gedžune, I.</td>
<td>2009</td>
<td>Educational action research for sustainability: Seeking wisdom of insight in teacher education</td>
<td>Journal of Teacher Education for Sustainability</td>
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<td>19</td>
<td>Cairns, G., Sliwa, M. and Wright, G.</td>
<td>2010</td>
<td>Problematizing international business futures through a 'critical scenario method'</td>
<td>Futures</td>
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<td>Bileišis, M.</td>
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<td>Empowering institutions: A case for connecting business and the academe through Phronesis</td>
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<td>Davis, M.</td>
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<td>What is in a recommendation? A perspective from work-based doctorates</td>
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<td>Melville, W., Campbell, T., Fazio, X. and Bartley, A.</td>
<td>2012</td>
<td>The Departmental Script as an Ongoing Conversation into the Phronesis of Teaching Science as Inquiry</td>
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<td>Robbins, R.</td>
<td>2013</td>
<td>Stories of Risk and Protection: A Turn to the Narrative in Social Policy Education</td>
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<td>26</td>
<td>Fougere, M., Solitander, N. and Young, S.</td>
<td>2014</td>
<td>Exploring and Exposing Values in Management Education: Problematizing Final Vocabularies in Order to Enhance Moral Imagination</td>
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<td>Ramsey, C.</td>
<td>2014</td>
<td>Management learning: A scholarship of practice centred on attention?</td>
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<td>29</td>
<td>Gilkison, A., Giddings, L. and Smythe, L.</td>
<td>2015</td>
<td>Real life narratives enhance learning about the ‘art and science’ of midwifery practice</td>
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<td>30</td>
<td>Karam, C. M., Sidani, Y. M. and Showail, S.</td>
<td>2015</td>
<td>Teaching business ethics in the global South: control, resistance, and phronesis</td>
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<td>31</td>
<td>Kreber, C.</td>
<td>2015</td>
<td>Reviving the ancient virtues in the scholarship of teaching, with a slight critical twist</td>
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<td>32</td>
<td>Kupers, W. M. and Pauleen, D.</td>
<td>2015</td>
<td>Learning wisdom: Embodied and artful approaches to management education</td>
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<td>Lee, Y. J.</td>
<td>2015</td>
<td>Learning activism, acting with phronesis</td>
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<td>35</td>
<td>Tyson, R.</td>
<td>2015</td>
<td>Educating for Vocational Excellence: The Auto/Biographical Exploration of Enacted Craft Pedagogy</td>
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<td>36</td>
<td>Kassam, K. A. S., Avery, L. M. and Ruelle, M. L.</td>
<td>2016</td>
<td>The cognitive relevance of Indigenous and rural: Why is it critical to survival?</td>
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<td>37</td>
<td>Salloum, S.</td>
<td>2016</td>
<td>The place of practical wisdom in science education: what can be learned from Aristotelian ethics and a virtue-based theory of knowledge</td>
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