Abstract. This article addresses how ‘powerful’ curriculum theory might be constructed from the perspective of the German Didaktik tradition – highly compatible with Schwab’s the Practical. To start with, I scrutinise Joseph Schwab’s model of curriculum planning and Wolfgang Klafki’s model of lesson preparation and examine two theories of content that underpin the two models. Invoking the German Didaktik tradition, I next explicate a distinctive form of theorising that yields powerful curriculum/Didaktik theory. I argue that Didaktik, together with the Practical, provides a viable way of constructing powerful curriculum theory – exemplified by a theory of knowledge and a theory of content – in the current context. I conclude by drawing implications for our understanding of the powers of professional educational knowledge and for tackling the current crisis in educational theory.

Keywords: Powerful educational knowledge; curriculum theory; Bildung-centred Didaktik; Pädagogik; the Practical; Schwab.
In my 2018 *JCS* article (Deng, 2018) I have analysed the current state of curriculum theorising by way of Schwab’s (1971/2013) ‘medical’ framework – symptoms, diagnosis and prescription. I argue that contemporary curriculum theorising is even more ‘moribund’ than it was 40 years ago, owing to the re-conceptualist turn in the 1970s – away from practice and the inner work of schooling and towards theoretical discourse. The curriculum field is positioned as a *theoretic* undertaking directed toward the pursuit of ‘complicated’ curriculum understanding, with a form of theorising characterised by a ‘upward flight’ toward variegated contemporary discourses such as neo-Marxism, postmodernism, poststructuralism, race gender, sexuality, LBGT and so forth. As a result, curriculum theory has literally nothing to contribute to the advancement of education in today’s context and has been increasingly marginalised and ignored by policymakers, curriculum specialists and classroom teachers.

Based on Schwab’s (1971/2013) idea of the Practical, I have advanced a ‘practical’ way to revitalise curriculum theorising that matters in practice and in the world of schooling by making three propositions. First and foremost, curriculum studies is a *practical* discipline centrally concerned with practice (curriculum planning, curriculum development, curriculum enactment or classroom teaching) for the advancement of education. Second, practice and inner work of schooling provide the essential point of departure for curriculum theorising. Third, curriculum theorising requires the use of theories in an eclectic, critical and creative manner. It is noteworthy that these three propositions find resonances in *Didaktik* - German ‘equivalent’ of curriculum studies¹. As a sub-discipline of *Pädagogik*², *Didaktik* is centrally concerned with classroom practice directed toward *Bildung* – the German concept of

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¹ *Didaktik* and curriculum can be considered as ‘parallel areas of the same subdiscipline’ (Kansanen, 1999, p. 25) and they address a very similar set of issues (teaching and learning goals, content selection and organisation, teaching methods, teaching and learning media, etc.) (Westbury, 2000). However, *Didaktik* is largely lacking in Anglo-American countries.  
² *Pädagogik* refers to a distinct discipline of education relating to the work and practice of schooling – widely accepted in European countries as an important educational discipline for teacher education (Biesta, 2011).
education. Practice provides an essential frame of reference for theory development. *Didaktik* theorising entails an eclectic use of theories from other disciplines such as philosophy and history.³

As a continuation of Deng (2018), this article addresses how ‘powerful’ curriculum theory is constructed through examining the way of curriculum theorising embedded in Joseph Schwab’s (1909–1988) model of curriculum planning and in Wolfgang Klafki’s (1927-2016) model of lesson preparation. This is intended to be a contribution to a body of burgeoning literature on the development of ‘powerful’ educational knowledge informed by Young and Muller’s theory of powerful knowledge (e.g., Barrett & Hordern, this issue; Horden, 2016, 2018; Marshall, 2014; Young & Muller, 2014).⁴ According to Young and Muller, specialised disciplinary knowledge has an ‘objective’ conceptual structure with properties and powers of its own. Created by specialist communities, this knowledge is *powerful* because it provides the ‘best’ understanding of the world. Acquisition of this knowledge allows students to move beyond their particular experience, to envisage alternative and to participate in social and political debates (Young & Muller, 2013, p. 245). Applying their platform to teacher education and professional development, Hordern, Muller & Deng (this issue) defines powerful educational knowledge as being ‘steeped in reflective consideration of educational purposes and processes’ and ‘meaningful and relevant to the practical work of educators’. In other words, powerful educational knowledge means the knowledge for the professional work and practice of educators. The ‘powers’ of this knowledge can refer to the effects or outcomes that are ‘powerful’ for school practitioners who possess the knowledge – such as a ‘better understanding of that practice’ and an ability of ‘making well-grounded educational judgements’ (Hordern, 2018, p. 792). Through an

³ The resemblance of the ‘practical’ way of theorising with the *Didaktik’s* can be explained in terms of the legacy of German scholarly tradition prevalent at the University of Chicago where Schwab developed his curriculum thinking, including the Practical (see Reid, 1980; Deng, 2020).
examination of the development of powerful curriculum theory for teachers and policy-makers, I wish to broaden and enrich our understanding about the development and powers of powerful educational knowledge.

To start with, I scrutinise Schwab’s model of curriculum planning and Klafki’s model of lesson preparation – two pieces of powerful curriculum knowledge – and examine two theories of content – two powerful curriculum theories – that underpin the two models. Invoking the German Didaktik tradition, I next explicate a distinctive form of theorising that yields powerful curriculum/Didaktik theory. I argue that Didaktik, together with the Practical, provides a viable way of constructing powerful curriculum theory – exemplified by a theory of knowledge and a theory of content – in the current context. I conclude by drawing implications for our understanding of the powers of professional educational knowledge and for tackling the current crisis in educational theory.

**Schwab’s model of curriculum planning and Klafki’s model of lesson preparation**

*Schwab’s model and its theory of content*

Schwab’s model is articulated in the Practical 3 paper (Schwab, 1973) in which he tackled the task of translating scholarly materials (historical accounts, scientific reports, literacy works) – embodiments of disciplinary knowledge – into the curriculum. The task entails deliberative curriculum planning undertaken by a deliberation group representing five domains of experience – the subject matter, the learner, the milieus, the teacher and curriculum making. It entails taking account of four commonplaces—the subject matter, the learner, the teacher and the milieu – on an equal basis. The deliberation process starts with having each group member discover the values, concerns and intentions of the other members and the relevance of those values, concerns and intentions to curriculum development. This is followed by
‘coalescence’ of what has been discovered, establishing a platform for translating scholarly material.

For Schwab, scholarly materials are indispensable resources ‘to be used in the service of students’ in the development of their intellectual and moral powers (understanding, dispositions, capacities) (Schwab, 1973, p. 515). A piece of material embodies educational or curriculum potential referring to possibilities or opportunities for the development of powers. The translation of scholarly materials into the curriculum then entails a discovery of the educational potential of a piece of material under consideration, by means of three faces (purport, originating discipline and access disciplines).

- The first face is the purport conveyed by scholarly material, e.g. a historical account of a past event, a moral dilemma or an image of a person or society by a piece of literature, or a way of classifying a group of natural phenomena by a scientific report. For students, understanding the purport can give rise to the broadening of knowledge horizon, transformation of perspectives, cultivation of moral sensitivity and so forth.

- The second face concerns the originating discipline from which scholarly material derives, standing for a coherent way of inquiry—a problem formulated, an investigation carried out, the data or argument sought and a conclusion reached. Having students understand and experience the problem, method, principle and conclusion of a particular inquiry allows them to develop independence in thinking, an ability to judge the reliability of knowledge claims, and an understanding of the merits and limitations of a particular mode of inquiry.

- The third face concerns certain access disciplines that need to be brought to bear on scholarly material to reveal its full complexity and sophistication. A particular piece of material is scrutinised in terms of different types of questions, different
perspectives and different methods of inquiry from various disciplines. In other words, it is subject to treatment in a variety of ways and according to a variety of methods. As such, the material renders diverse opportunities for the cultivation of critical thinking, freedom of thought, self-understanding and prudent thought and action. (Deng, 2020, pp. 51-52; also see Schwab, 1973)

I need to add that unpacking the material in terms of purport gives rise to opportunities for students to develop the skills of reading, comprehension and critical interpretation as well.

An analysis of educational potential is required for all pieces of scholarly material competing for a place in the curriculum. The final decision on the inclusion of a particular piece of content or subject matter in the curriculum is made with reference to its educational potential and in view of the four curriculum commonplaces. Schwab (1973) explained:

*From the subject matter:* the purport of the material an important historical event or condition, for example? Is it good history, arising from well-validated facts, interpreted in a defensible way toward insights useful to our time and circumstance? *From the milieu:* Does it contribute toward improvement of a community? Is it likely to be acceptable to that community? If it is novel or disturbing, are there steps can take to facilitate its acceptance? *From the children,* is the good it is supposed to do more urgent or more important than the goods served by competing curricular bits? Is it appropriate to the age and experience of the children under consideration? What consequences may it have for the relations of children to parents and to other significant adults? What effect may it have on the relations of children to one another? What effect may it have on the relation of each child to himself? *From the teacher:* Is he or she prepared to teach it as it should be taught? Can this training be successfully entered upon? Will the teacher be in sympathy with the values embodied in the
curricular bit? If not, are there pre-vailing values among teachers which can be used to help enlist them in the service of the embodied values? (pp. 520–521; emphases added)

The three faces – purport, originating discipline and access disciplines – constitute a *theory of content* that underpins Schwab’s model of curriculum planning. This theory is *powerful* because it provides curriculum planners with a perspective on what constitutes the educational potential of content and a set of categories to ascertain the educational potential. This set of categories can also be used by a teacher to unpack and unlock the educational potential of content in classroom teaching. In *College Curriculum and Student Protest* Schwab (1969) illustrated how to recover the meaning in scholarly material through ‘arts of recovery’ – in terms of the meaning conveyed (the purport), a particular way of inquiry involved (the originating discipline), and multiple ways of inquiry brought forth (access disciplines) that could be brought to bear on the material. By means of these three categories (faces), a scholarly material or text is made to open up manifold opportunities for students to expand their understandings and cultivate their intellectual and moral powers.

The development of this theory of content entails theorising knowledge for a vision of liberal education and, furthermore, for curriculum development directed toward that vision. It was rooted in the experience of Schwab as a key figure in the development of the reforming liberal arts curriculum (Levine, 2006; Westbury & Wilkof, 1978). The development was also informed by a kind of philosophical and hermeneutic thinking – which found its origin in Germany – prevalent at the University of Chicago during the first half of the 20th century (Reid, 1980; Westbury & Wilkof, 1978). The curriculum was animated by and directed toward a vision of liberal education centred on the cultivation of a set of human powers that were purported to equip students to confront the challenges of their times. The powers include, for instance, a ‘critical understanding of the limitations of human knowledge’ (Schwab, 1978a, p. 67), a disposition to ‘quest, beyond mere survival, for a state called
“happiness”, an ability to ‘deliberate wisely about technologies based on science’ and ‘to choose thoughtfully among several technological methods’ (Levine, 2006, p. 119).

The cultivation of human powers was achieved through encounters with the ‘essence’ of academic disciplines (sciences, humanities and arts), enabled by a curriculum that promoted conversations, discourses and disciplinary enquiry (Reid, 1984). Building on the work of his colleague Richard McKeon (1900-1985), 5 Schwab conceived of the essence of an academic discipline as consisting of not only statements or conclusions but also arts or methods employed in disciplinary enquiry. A mastery of those arts or methods enables the development of intellectual and moral powers. Furthermore, for Schwab, statements or conclusions (the ‘fruits of the discipline’) are not a ‘rhetoric of conclusion’ but something of an evolutionary character, open to questions and varied ways of enquiry from multiple disciplines. Through studying what scientists do, Schwab (1978) delineated multiple and diverse ways of enquiry in the disciplines of science. And he showed that the ways of enquiry in an academic discipline were embedded in its ontological and epistemological tradition that shapes the kind of questions asked, the kind of data sought, the methods employed, and the purpose intended. Overall, the approach employed by Schwab to theorising the essence of academic disciplines is known as hermeneutics. ‘For Schwab’, Westbury and Wilkof (1978) observed, ‘to understand a work or a body of work was to enter the mind of the scientist or group of scientists with a consciousness of the theory that they held as lying itself in a tradition’ (p. 26).

In other words, the conception of the essence of academic disciplines – or Schwab’s *theory of knowledge* – is articulated in the service of a vision of liberal education. The theory of content in Schwab’s model of curriculum planning entails a restatement of his theory of

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5 For this, readers are referred to McKeon (1937, 1949).
knowledge for its use in curriculum planning and classroom teaching. The three ‘faces’ of content (purport, originating discipline and access disciplines) parallel the three elemental aspects of the essence of academic disciplines (statements or conclusions, arts or methods of enquiry in a discipline and a variety of arts of enquiry in multiple disciplines) correspondingly.

**Klafki’s model of lesson planning and its theory of content**

As with Schwab’s model, lesson planning in Didaktik prioritises an analysis of the educational potential of content for students. Künzli (2000) wrote:

> A didactician looks for a prospective object of learning . . . and he asks himself what this object can and should signify for the student and how the student can experience this significance . . . All other questions and problems – other than the significance of the learning content – such as class management, individual and social learning, learning control, individual learning speed, appropriate representation, etc. – are subordinate to this central concern and gain significance only when the question of educative substance (*Bildungsgehalt*) is at issue. (pp. 39–40)

Lesson preparation is toward a design of ‘opportunities for children to make fruitful encounters with certain contents of education’ (Klafki, 2000a, p.143). The first step is that of analysing the essential aspects, meaning and significance of content that constitute its educational potential.

Klafki (2000a) formulated a five-step set of questions that serves to assist teachers in lesson preparation:
1. What wider or general sense or reality does this content exemplify and open up to the learner? What basic phenomenon or fundamental principle, what law, criterion, problem, method, technique, or attitude can be grasped by dealing with this content as an ‘example’?

2. What significance does the content in question, or the experience, knowledge, ability or skill, to be acquired through this topic, already possess in the minds of the children in my class? What significance should it have from a pedagogical point of view?

3. What constitutes the topic’s significance for the children’s future?

4. How is the content structured (which has been placed in a specifically pedagogical perspective by questions 1, 2 and 3)?

5. What are the special cases, phenomena, situations, experiments, persons, elements of aesthetic experience, and so forth, in terms of which the structure of the content in question can become interesting, stimulating, approachable, conceivable or vivid for children of the stage of development of this class? (151-157)

The set of questions constitutes a kind of powerful curriculum knowledge for teachers. It is powerful in the sense that a command of this knowledge enables teachers to identify the educational substance of content and to unlock and actualise its educational potential for students. Questions 1, 2 and 3 concern the educational substance and potential of content – in terms of what should be taught, what the content signifies and why it is significant for students. These questions go beyond a teacher's comprehension of the content to ‘the ways in which a teacher makes connections with the deepest objective substance of the cultural asset’ (Vásquez-Levy, 2002, p.122) and unlocks its potential for the formation of students as an individual and a citizen. Questions 4 and 5 deal with the means of actualizing its educational potential in terms of content structure and pedagogical representations.
Behind this set of questions is a notion of Bildung and a *theory of educational content* (*Theorie der Bildungsinhalte*) that serves to inform curriculum planning and classroom teaching. Bildung refers to the outcomes and process of self-formation through the development of self-awareness, capabilities, freedom, and social responsibilities that is achieved through interactions with the world (von Humboldt, 2000). Litt explained:

When we refer to a person as educated (*gebildet*)... we mean at least that this person has succeeded in establishing a certain degree of order in the whole of his existence, in the wide variety of gifts, opportunities, drives and achievements he incorporates, linking the one to the other in the appropriate relationship, guarding against over-emphasis, but also against suppression of the particular. However, a person can never, never create order within himself, unless he has regulated his relations to the world in an appropriate manner. If we regard the one side by side with the other, we may use the term 'education' (*Bildung*) for any state of mind of a person which puts him in a position to impose order upon himself, as well as upon his relations to the world. (Litt 1963, cited in Klafki, 2000a, pp. 146-147)

The world, independent of human thinking, is processed by human thought represented by academic disciplines (humanities and sciences) and general action (Lüth, 2000).

The theory of educational content (*Theorie der Bildungsinhalte*) can be seen as consisting four interrelated concepts, *contents of education* (*Bildungsinhalt*), *educational substance* (*Bildungsgehalt*), *the elemental* (*das Elementare*) and *the fundamental* (*das Fundamentale*). As the stuff in the curriculum, contents of education result from a deliberative process of selection and organisation of the wealth of academic knowledge, experience and wisdom for Bildung. Contents, set aside for teaching, are seen as embodying educational potential for Bildung:
… these contents, once the children or adolescents have internalized and thus acquired them, would enable them to ‘produce a certain order’ (Litt) in themselves and at the same time in their relation to the world, to ‘assume responsibility’ (Weniger), and to cope with the requirements of life, and take the free chances of life. The contents of teaching and learning will represent such order, or possibilities for such order, such responsibilities… (Klafki, 2000a, p. 150)

The potential lies in the educational substance (Bildungsgehalt) of content:

Within the whole of the contents to be acquired there is the essential and the inessential, fruit and leaves, the interior and the exterior. As the learners process the matter, differences emerge ... There are different degrees of internalization of what is presented: some matter penetrates through to the roots of inner growth, the rest remains peripheral. From among the whole of an object of instruction, we distinguish its educational substance (Bildungsgehalt) and comprehend the latter as those elements of the former where the subject matter can begin to take root and to be internalized, and on whose retention the value of the learning and the practising essentially depends.... Teach in such a way that what is given is learned... and that its substance (Bildungsgehalt) can take effect. (Willmann 1957, cited in Klafki, 2000a, p. 147)

The educational substance of the content is found in the elemental categories or aspects (concepts, principles, relations, values, methods) that determine the educational potential of content. Content, by virtue of its educational substance, can contribute to Bildung – a fundamental change in the perspectives, modes of thinking, dispositions and
ways of being-in-the-world of individual students (Krüger, 2008). The fundamental refers to the transformative impact on, or contribution to, the becoming and formation of the individual (Bildung). In other words, the elemental is content prepared for children in teaching, conceptualised by an adult. The fundamental is content brought into function in teaching, what the child does with it and how his or her perception of things is changed (Krüger, 2008). This constitutes what Klafki called ‘categorical Bildung’. The unity between the objective and the subjective – or between the elemental and the fundamental – is essential to fruitful educative teaching.

This theory of content is powerful for curriculum planners in the sense that it serves to inform the selection of content that has the potential to open up new ways of understanding, thinking and being. It too serves to inform the development of the state curriculum guideline, the Lehrplan, in support of teaching for Bildung. In the Didaktik tradition the Lehrplan only specifies the matter (contents) to be taught in schools but not the educational substance and meanings – which are to be identified, interpreted and unpacked by teachers in their classroom situations (Hopmann, 2007). Furthermore, the theory of content, together with Bildung, provides teachers with an educationally powerful way of thinking about teaching. Teaching entails unlocking the educational substance, meaning and significance of content and, in so doing, creating a ‘space’ that allows the students-content encounter to occur in a fruitful and transformative manner. And, this way of thinking can ‘renovate and stimulate’ practice. It enables teachers to ‘strive for originality’ and to search for ‘valid and generally representative structures’ (narratives, dramas, stories) which also give depth to teaching (Dyk, 2006).

As with the Schwab’s model, the development of the theory of content entails theorising knowledge for Bildung and, furthermore, for curriculum planning and classroom teaching directed toward Bildung. This is informed by a phenomenological and hermeneutic
perspective, with the ‘philosophical-cum-hermeneutic approach’ as the primary method (Schriewer, 2017). Largely by way of philosophical reflection, neo-humanists conceived of the role of knowledge in ways that is productive of Bildung. There are various forms of knowledge – social, geographic, historical, religious, physical, etc. – each of which provides access to an aspect of the world, each of which has the potential or power to change perspectives and standpoints, liberate and enable the mind (Lüth, 2000; Roth, 2000). The role of knowledge includes: (1) a medium for intellectual and moral development, (2) an objectification of activities in which possibilities of the development of various human powers take shape, and (3) an ‘enablement’ from the specific and the local to the general and the universal (Klafki, 2000b; Lüth, 2000). This theory of knowledge is further developed into a theory of content – concerning what constitutes the educational potential of content and how the potential can be analysed and unlocked – that serves to inform curriculum planning and classroom teaching. The development of such a theory of content is informed by theoretical reflection on practice and analyses of educational thoughts. For instance, the above Klafki’s conceptualisation of content in terms of categorical Bildung was developed based on his analysis of the views of content and learning over 150 years of educational theory in Continental Europe (Willbergh, 2016).

**Convergence and divergence**

There are seeming differences between the two models. Schwab’s model is concerned with the planning of a curriculum that entails a translation of scholarly material into a course of study, whereas Klafki’s model is with the planning of a lesson or a set of lessons that entails a translation of the content in the state curriculum guideline for teaching and learning.
The former views academic disciplines in terms of not only achievements but also arts or methods of inquiry, whereas the latter views academic disciplines as established bodies of knowledge.

Differences aside, significant signs of convergence exist. The two models are directed toward a vision of education centred on the formation of the self through the cultivation of human powers and dispositions. Both entail theorising knowledge and content in a way that is productive of the vision of education by way of theoretical or philosophical inquiry informed by hermeneutics. Both Schwab and Klafki regard theorising as an Aristotelian ‘practical’ undertaking centrally concerned with the improvement of practice rather than merely the establishment of abstract theories and principles. They both take the burden of translating the vision of education into curriculum planning and classroom teaching (Reid, 1980).

These signs of convergence imply a distinctive form of theorising that can yield powerful curriculum theory as exemplified by a theory of knowledge and a theory of content in Schwab’s and Kafki’s models. This form of theorising has long been established in the German tradition of Didaktik shaped by a kind of philosophical and hermeneutic thinking which, as hinted earlier, was also prevalent at the University of Chicago where Schwab developed his curriculum thinking. In what follows I expound this distinctive form of theorising by considering Didaktik – a central component of Pädagogik.

**Theory and theorising in Didaktik**

The development of the German academic discipline of education, *Geisteswissenschaftliche Pädagogik*, is rooted in the rich human sciences (*Geisteswissenschaftliche*) tradition associated with German eminent thinkers such as Friedrich Schleiermacher (1768-1834),

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6 The prevalence of this kind of thinking has to do with the legacy of the German philosophical tradition at the University of Chicago (see Reid, 1980).

As a central part of *Pädagogik*, *Didaktik* provides a body of thinking about teaching and learning under the condition of schooling, with a distinctive form of theorising characterised by three propositions, namely (1) a concept of *Bildung*, (2) the dignity of practice and (3) an interpretive and hermeneutic way of relating theory to practice.

As the central goal of education, *Bildung* defines the orientation and commitment of *Didaktik* as a distinctive (sub)discipline of education. The term, broadly defined, refers to both the process and product of self-formation via the cultivation of intellectual and moral powers, encompassing self-awareness, social responsibility, self-determination (autonomy), co-determination (participation) and solidarity (von Humbolt, 2000; Klafki, 1998). *Bildung* is also seen as *Allgemeinbildung* (general *Bildung*) – the development of all human powers, the moral, cognitive, aesthetic and practical (Jank, 2014; Klafki, 2000b). It is achieved through the interactions with various forms of human knowledge and experience and with the external world (von Humbolt, 2000; Lühth, 2000). As noted earlier, a theory of knowledge is found that conceives of the role and essence of knowledge in a way that is productive of *Bildung*.

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7 *Geisteswissenschaftliche* *Pädagogik* arose from criticism of Herbartian *Pädagogik* and a revisiting of the original thinking of Herbart and Kant (Hamilton, 1999; Hopmann & Riquarts, 2000). *Pädagogik* is positioned within the realm of human sciences (Geisteswissenschaften) rather than natural science (Naturwissenschaften), with grounding from the thinking of European Enlightenment.
The commitment to Bildung entails a distinctive perspective on what educational practice is. In Bildung-centred Didaktik classroom teaching is viewed as a ‘fruitful encounter’ of students with contents as cultural assets, mediated by a teacher and directed toward Bildung (Klafki, 2000a). This image of teaching, which is distinctively educational, can be traced back to Herbart’s notion of education by teaching or educative teaching (Hopmann, 2007). Theorising or theory construction in Didaktik is particularly concerned with how a vision of educative teaching is translated and actualised in classroom, as exemplified in Klafki’s model of lesson preparation.

The second proposition holds that practice has its own ‘dignity’ that makes it independent of and precede theory. As Schleiermacher explained,

…practice is much older than theory, so that it can simply not be said that practice gets its own definite character only with theory. The dignity of practice is independent of theory; practice only becomes more conscious with theory. (Schleiermacher, 1826, cited in Uljens & Ylimaki, 2017, p.122)

Therefore, it is the practice of teaching that constitutes an essential point of reference for theory construction. The ‘only legitimate approach to theory building’, Gundem (2000) contends, ‘is to examine the educational phenomena as they exist in the practice of teaching and schooling’ (p. 241). Similarly, Weniger (2000) contends that theorising ‘proceeds from the actuality of the order of teaching, from the real-world educational situation’ (p. 113). Klafki’s model of lesson planning, and the theory of content which underpins the model, were developed out of the concern for the practice of teaching under the condition of schooling as an institution.

Didaktik, then, is a ‘practical’ (sub)discipline centrally concerned with practice directed toward the advancement of education (Bildung). It is, in the eye of Schleiermacher,
‘not about formulating abstract rules or guidelines, but about the vicissitudes and particularities of practice’ (Friesen, 2020, p.310). The development of theories requires bringing to bear external theoretical resources to understand and analyse practice. Yet issues of practice are set above all external theories, determining what theories are to be employed. Theories are of ‘serving and subordinate’ nature, used in the service of illumining, interpreting and theorising about practice (Künzli, 2013).

The third proposition, closely related to the second, is that theorising requires an interpretive and hermeneutic way of relating theory to practice. The use of theory is interpretive and hermeneutic; the aim is ‘to penetrate, explain and articulate alternative paths to take’ with respect to practice (Gundem, 2000, p. 257). Accordingly, theorising is not to provide teachers with a body of methods and procedures but ‘a rich set of normative frameworks for thinking about the interstices of pedagogical encounter itself’ (Shirley, 2008, p. 38). Viewed in this context, the artificial separation between theory and practice dissipates. Relating theory to practice is a basic task to be accomplished by teachers through allowing their consciousness, perspectives and way of thinking to be enhanced, broadened and transformed by theory (Van Der Stoep, 1972/2020).

Theory, then, is powerful because it provides teachers with theoretical frameworks that enable them to reflect upon their practices. It allows a teacher to ‘give an account of the nature, scope and meaning of his action’ (Van Der Stoep & Louw, 1974/2005, p. 16) and to ‘be able to theoretically account for or justify his practical activities in order to avert faulty reasoning, prevent faulty educating’ (p.15). Theories ‘compel the adult to thoroughly reflect on the aim, the means and the persons involved in the event of educating’ (p. 15). They allow the teacher to transcend ‘the boundaries of everyday life and fashion’ (Kenklies, 2012, p. 268) and ‘the horizon of his own successes and failures’ (p. 270).
In addition to Didaktik and Pädagogik, teachers are to employ theories from other disciplines (psychology, history, sociology) to reflect, interpret and analyse issues pertaining to practice. With respect to place of psychological and human development theories in lesson preparation, Ruth (2000) explained:

Psychological reflection requires the teachers to know their students and to know human nature. This is a vast field. What does knowing one’s students mean? It means knowing them as individuals and as a class. As individuals at their stage of development and maturity, in their personal characteristics; and as a class, in their origins, their social composition, their class spirit, their youth spirit. This is demanding a great deal and presupposes years of dealing with young people, the class, and the individual. (p. 131)

Theories from other disciplines like history and sociology enable to teachers to reflect on and understanding better issues of schooling and education within a broad social and cultural context.

Taken together, the three propositions together characterise a distinctive way of theorising in Didaktik. It is ‘practical’ in the sense that it is centrally concerned with practical issues (e.g., lesson planning) viewed as embedded in the institutional context of schooling in which a shared conception of education and a state or national curriculum are commonplaces. Teaching is construed as a deliberative endeavour that calls for curriculum/Didaktik thinking tackling the ‘what’, ‘why’ and ‘how’ questions in light of specific learners within a specific instructional contexts. The primary task of theorising is to develop sets of categories and frameworks or models that can provide guideline and direction on the work of teachers toward the advancement of education -- i.e., toward Bildung. However, this approach to theorising, albeit treating practice as an essential point of departure, is largely philosophical
in nature, without being informed by empirical research – an issue to which I will return in the concluding section.

Nevertheless, this approach to theorising is predicated on the belief that Pädagogik is a discipline of education in its own right. Pädagogik or Didaktik has ‘its own terminology, its own points of departure, its own methods of investigation’ (Krüger, 2008, p. 216). Yet the idea that Education is a discipline in its own right with its own way of theorising is ‘unthinkable’ in Anglo-American traditions of educational thinking where education is not a discipline but a field to be studied from multiple perspectives derived from philosophy, psychology, sociology and history, among others (Biesta 2011, Klafki 1998). 8 Accordingly, there is no distinctively educational or curricular way of theorising but psychological, sociological, philosophical or historical way of thinking and theorising about education (Biesta, 2011; Furlong & Whitty, 2017; McCulloch, 2017). Yet, this disciplinary ways of constructing educational theory has been increasingly challenged for it yielding theory that is irrelevant to the day-to-day lives of practitioners and has very little impact on educational policy and practice (Furlong, 2017; McCulloch, 2017). Then, there is a need to explore new approaches to the development of educational theory.

**Toward constructing powerful curriculum theory**

I now turn to argue that that Didaktik, together with the Practical, provides a viable way of constructing powerful curriculum theory in today’s context. I will focus on the development of a theory of knowledge and a theory of content directed toward the cultivation of human powers.

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8 This is an exception. At the University of Chicago Schwab and many of his colleagues tended to believe that Education was a field in its own right (cf. Levine, 2006; Schwab, 1970/2013).
Before proceeding, I need to point out that Didaktik, alongside its forms of theory and theorising, has been subject to question by the current global discourse centred on academic standards, performativity, accountability and international competition (Hopmann, 2008). Bildung-centred Didaktik is deemed obsolete and irrelevant in view of the embarrassingly low performance of German students in the PISA tests (Hopmann, 2008; Schriewer, 2017). Education is held as ‘an efficient machine for the production of human capital’ (Labaree, 2017). Teaching is a means to bring about measurable outcomes through the employment of evidence-based practices. Theory, produced primarily by quantitatively driven empirical research, is to tell teachers ‘what works’ and provides evidence of effectiveness of policy and practice (Biesta, 2007, 2015). Such a discourse has been challenged by a host of scholars (e.g., Biesta, 2007, 2010; 2015; Deng & Gopinathan, 2016; Hopmann, 2007, 2008; Labaree, 2014). 9

To argue that Didaktik provides a viable way of developing powerful curriculum theory, then, entails an intervention in the current global discourse. The argument is made through reclaiming the three propositions regarding the distinctive form of theorising in Didaktik and restating them in a way that addresses the challenges and demands of our times, with inputs from social sciences and empirical research.

First and foremost, curriculum theorising needs to be directed toward and animated by a vision of education centred on the cultivation of human powers (understanding, capacities, dispositions) in today’s context. The term powers must not be conflated with the so-called 21st century competences – advocated by OECD, UNESCO and other organisations (see Voogt & Roblin, 2012) – which are generic and free-floating, independent of knowledge and

9 The pursuit of human capital entails a narrowing of the purpose of education (Biesta, 2009; Labaree, 2014). The promotion of measurable outcomes and evidence-based practices is at risk of destroying the essence of practice as a deliberative educational endeavour (Biesta, 2007; Hopmann 2007). The endorsement of the kind of theory centred on ‘what works’ and ‘effectiveness’ ignores questions about ‘what is educationally desirable’ and restricts ‘the opportunities for educational practitioners to make such judgments in a way that is sensitive to and relevant for their own contextualized settings’ (Biesta, 2007, p. 20; also see Hopmann, 2007).
content. This concept of competency is not an educational and curricular concept – but a concept that originates from the field of human resource management (Biesta & Priestley, 2013). The notion of powers concerned here is informed by Bildung and the Chicago conception of liberal education, with a long and rich history in educational thinking.¹⁰ From this perspective, powers are developed through interactions with various branches of human knowledge and ‘with the social and political situation, with technical achievements, cultural artifacts, and so on’ (Jank, 2014, p. 116). To articulate a vision of education appropriate for the current century, we need to engage with questions such as: What does it mean to be an independent, autonomous individual who is actively participating in and interacting with the current social, economic and cultural world characterised by globalisation, transnational economies, an ever-increasing rate of information exchange and mobility, new technologies, and digital cultures, among others? What knowledge, value and skills does he or she need to possess to be a responsible citizen? What are the intellectual, moral, social and technological powers that he or she needs to develop to become free and independent individual and to face the challenges of the current age? To ask questions like these is to invite curriculum theorists, educationists and researchers to grasp the challenges and demands facing education today and, not least, to restate or reformulate Bildung in a way that can speak to those challenges and demands.

Such a vision of education is fundamentally lacking in the current global discourse on education. Yet the acquisition of a body of powerful knowledge, value and skills is essential for ‘reproducing human societies’ and ‘providing the conditions which enable them to innovate and change’ (Young, 2009, p. 10). This distinctive purpose of schooling is inextricably connected with another more fundamental purpose (i.e., Bildung) – the formation

¹⁰ Both Bildung and the Chicago conception of liberal education find their root in the ancient Greek ideal of liberal education (paideia) – the well-rounded formation of the self through culture.
of independent, autonomous and socially responsible individuals who are equipped to face the challenges posed by today’s world through the cultivation of human powers. This latter purpose is essential for the development of all individuals in whom the best possibilities of human nature are realised to the limit of each individual capacity. This is a social justice issue as well because the cultivation of human capabilities for all is an indispensable condition for social justice and human well-being (Sen & Nussbaum, 1993). ¹¹

This vision of education serves to secure the autonomy of curriculum theorising from foundation disciplines (philosophy, sociology, history and psychology of education) – while needing to be informed and enriched by their concepts and theories. It sets the *educational* orientation of curriculum theorising and the ‘framework of assumptions and ambitions within which practical or theoretic problems in education should be confronted’ (Reid, 1980, p. 249), if curriculum is to produce its own theories. In this context, a theory of knowledge appropriate to the vision cannot not be derived from theories developed in philosophy that merely deal with *epistemological questions* centring on the nature, organisation or structures and justification of knowledge (cf. Fenstermacher, 1980). Nor can it be identified from theories developed in sociology that tackle *sociological questions* centring on social and institutional arrangements in which knowledge is created and practiced (cf. Young & Muller, 2013). The theory of knowledge concerned here is distinctively *educational*, driven by the concern for the contribution of various forms of knowledge to the formation of individuals via the cultivation of human powers. What are the role and contribution of knowledge to the formation of independent, autonomous and socially responsible individuals in today’s context? What are the various forms of knowledge – academic, disciplinary knowledge,

¹¹In a similar vein, Lambert (2014) argues that without such cultivation, students ‘are deprived and restricted in their personal and intellectual growth into fully capable adults’ (p. 13)
practical, technological – that have the potential to open up new ways of thinking, to broaden horizons, and to develop a variety of understanding, capacities, and dispositions that equip individuals to meet the challenges of our times? How might the educational potentials of these various forms of knowledge be conceived and conceptualised? Theories of knowledge from philosophy or sociology are drawn upon when they can shed light on questions like these.

These questions call for serious studies of various forms of knowledge to discover their potential contributions to education. They call for as well interpreting and theorising the essence of a particular form of knowledge in a way that is productive of self-formation and cultivating human powers. The envisaged theory of knowledge is powerful in the sense that it provides a broader perspective on the role and significance of knowledge in education and a powerful way of thinking about the educational potential of knowledge for the cultivation of human powers in today’s context.

Second, we must reclaim the dignity of practice and treat practice as the essential frame of reference for theorising. In classroom, teaching is a deliberative educational endeavour characterised by an encounter between content (a special knowledge resulting from a deliberative selection of knowledge for educational purposes) and students within a specific context, mediated by a teacher, toward educational aims. Informed by a theory of content, the teacher identifies the educational substance of content (comprised by elemental elements), interprets and unpacks the meaning and significance in view of who students are, and determines exemplary forms (narratives, dramas, stories) that are embodiments of the substance. In so doing, he or she unlocks the educational potential of content for students and, correspondingly, students open themselves to what has been opened for them. To reassert the dignity of educative teaching is to counter the rhetoric of best practices and what works that reduces teaching to a ‘factor’ contributing to predetermined outcomes and treat content as
merely something to be acquired. In *Didaktik* and Schwab’s thinking it is not content as such that creates the realm of teaching ‘but an understanding of how a student meets this knowledge [content] based on his or her own being’ (Hopmann, 2007, p. 112) in a way that brings about opportunities for *Bildung*.

To develop a theory of content that can inform the selection and organisation of content and support educative teaching directed toward the above envisaged vision and informed by its theory of knowledge, we need to engage with questions such as: How would knowledge be selected and organised into the content of the curriculum centred on self-formation and the cultivation of human powers in the current age? What constitutes the educative substance of content that determines its educational potential? How might the educational potential be analysed and unlocked? How might students ‘open up themselves’ for the potential that is unlocked?

Such questions are *curricular and pedagogical*. Solutions to these questions call for going beyond the conventional single-subject-based mode of organising content and employing more ingenious, innovative mode such as issues-based, cross-disciplinary modes (see Deng, 2009; Klafki, 2000b; Levine, 2006; Westbury & Wilkof, 1978). They call for as well a creative, innovative approach to analysing and unlocking the educational potential of content and developing means and methods which would enable students to encounter the educational substance of content and bring about the cultivation of human powers in classroom. Such an approach, means and methods find manifestations in Schwab’s conception three faces (purport, originating discipline and access disciplines) and Klafki’s model of *Didaktik* analysis (the five-step set of questions) – both of which, I believe, can be reformulated and revised in a way that is appropriate for the cultivation of human powers today. The envisaged theory of content is *powerful* in the sense that it contributes to ‘a more fruitful understanding of content processes as (a) formation for community and society and
(b) transformation to rich pedagogical potential’ (Doyle, 2017). It also enables creative, innovative approaches to analysing and disclosing the educational potential of content in classroom.

Whether for the articulation of a vision of education or for the development of a knowledge of knowledge and a theory of content, we need to bring to bear theories from external sources (philosophy, history, sociology, psychology, media studies, practical knowledge/wisdoms and so forth) that can shed light on issues concerned and contribute to their resolutions. This calls for a collaborative interdisciplinary approach to the development of powerful curriculum theory, together with a commitment to the interpretive and hermeneutic way of relating theory to practice discussed above. This approach and commitment resonates with Maton’s (2014) claim that powerful professional knowledge ‘comprises not one kind of knowledge but rather mastery of how different knowledges are brought together and changed through semantic waving and weaving’ (p, 181). However, all (external) theory is incomplete and partial; it highlights certain facets of phenomena but thrusts other facets into the background. All theory too entails a ‘special bias [partiality of view] imposed on the selection and interpretation of facts’ (Schwab, 1970/2013, p. 660). To overcome these issues, we need to employ the eclectic arts articulated by Schwab which help us ‘to ready theory for practical use’ (Schwab, 1971, p. 495). The arts allow us to ‘discover and take practical account of the distortions and limited perspective which a theory imposes on its subject’ (p. 323) and to combine various theories to form a more appropriate ‘whole’. In other words, we need use various theories in combination ‘without paying the full prices of their incompleteness and partiality’ (Schwab, 1970/2013, p. 600). I believe the eclectic arts enable us to address the challenging question: ‘how can disciplinary knowledge and other

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12 Maton’s (2014) notion of waving and weaving refers to the process of navigating and integrating various knowledge forms.
external knowledges be brought together with professionals’ reflective practice and practical theorising in professional arenas to produce really powerful professional knowledge and learning?’ (Furlong & Whitty, 2017, p. 49).

It is important to note that the development of a theory of knowledge and a theory of content is predicated on a vision of education and a conception of educational practice. Yet, there are not one but many visions of education and conceptions of practice which are always competing and conflicting. What the vision of education is and how educational practice is defined and conceived are therefore not just questions for curriculum theorists, educational scholars and researchers. They are questions for politicians, policymakers, stakeholders, school principals and classroom teachers as well and, therefore, are open to the wider public and subject to on-going debates and discussions which we need to engage with. To contribute to the debates and discussions, curriculum scholars need to not only articulate but also defend their vision of education and conception of practice – and this will be addressed in what follows.

**Conclusion and discussion**

I have discussed how powerful curriculum theory might be constructed from the perspective of the German Didaktik tradition – highly compatible with the Practical. As I argue, the construction calls for a form of theorising that is distinctively educational and curricular – in terms of (1) a vision of education, (2) practice as the essential point of departure for theorising and (3) an interpretive and hermeneutic way of relating theory to practice. The construction is predicated on the idea that curriculum is a distinctive (sub)discipline in its own right – a discipline that is centrally concerned with practice for the advancement of education. Curriculum must formulate its own theories such as a theory of knowledge and a theory of content.
How might the position of curriculum as (sub)distinctive discipline in its own right be defended amongst current varied political, social and economic demands in terms of transnational economies, new technologies, digital media, accountability and global educational reform, among others? What might be the proper relationship between curriculum theory and existing political, cultural, and economic orders? These two questions can be addressed by adopting a non-affirmative position (Benner 1991; Uljens 2002) that is found in the European traditions of educational thinking. To create a discursive space for developing education theory, education is seen in ‘a non-hierarchical relations to politics, culture and economy’ (Uljens & Ylimaki, 2015, p. 38). It is neither ‘superordinate’ nor ‘subordinate’ to political, social and economic demands and expectations. For curriculum theorising, the implication is that to defend the autonomy of curriculum theory, curriculum theorists need to engage with but not affirm or yield to existing political, social and economic expectations and demands. They are to come up with defensible ‘educational solutions’ to the expectations and demands while maintaining the dignity and autonomy of the field. They do so by restating or reconstructing the central propositions of the field in a way that speaks to the expectations and demands. This approach to curriculum theorising finds a manifestation in the preceding discussion regarding the articulation of a vision of education and the development of a theory of knowledge and a theory of content. The point is that curriculum theorists must construct curriculum visions, principles and frameworks that not only matter in practice but also equip them to participate in current social and political debates on issues concerning education, schooling, curriculum and classroom teaching.

The construction of powerful curriculum theory would not be possible without being informed by empirical research. Many of the questions concerning a vision of education, a theory of knowledge and a theory of content are not only theoretical but also empirical questions. What are challenges and demands facing school education today? What are the
forms of knowledge that have potential contributions to today’s education in the light of the challenges and demands? How might knowledge be selected and organised into the content of the curriculum directed toward the cultivation of human powers in the current age? How might the educational potential of content be analysed and unlocked by teachers? How might students ‘open up themselves’ for the potential that is unlocked? Questions like these call for programmes of empirical research that provide empirical illuminations or groundings for the development of powerful curriculum theory. On this account, the traditional form of theorising in the Didaktik tradition – which tends to be philosophical by nature, without empirical bases (Kansanen, 2017) – is insufficient for the task.

I now turn to discuss the contribution of this article to the literature on powerful professional educational knowledge and, in particular, to this special issue in JCS. Through articulating in what sense curriculum theories – a theory of knowledge and a theory of content – are powerful, this article contributes to a better understanding of the ‘powers’ that professional educational knowledge gives to educators who possess it. The powers include a ‘powerful’ way of thinking about knowledge that goes beyond the mere task of helping students gain access to knowledge to the task of using knowledge as a resource/vehicle to transform their perspectives and ways of thinking and to cultivate their capacities and dispositions. The powers also include means and methods for planning and implementing the latter task – informed by a theory of knowledge and a theory of content – as indicated in Schwab’s or Klafki’s model. Curriculum theory, in the words of Fenstermacher (1980), provides ‘an enlightened and illuminating means to engage persons [students] in structuring their experiences in ways that continually enlarge their knowledge and understanding, their autonomy and authenticity, and their sense of place in the past, present, and future of the human race’ (p. 196). Furthermore, a powerful theory of content enables curriculum developers to devise innovative approaches to content selection and organisation and equips
teachers with perspectives and tools that allow them to plan and bring about students’ fruitful encounters with content in classroom (see Klafki, 2000a, 2000b; Schwab, 1972; Deng, 2009; Levine, 2006). In short, curriculum theory can ‘renovate and stimulate’ practice, be it curriculum planning or classroom teaching (Dyk, 2006; Krüger, 2008). This understanding of the powers of educational knowledge is predicated on the notion that teaching is a deliberative educational endeavour at the heart of which lies a teacher’s interpretation of content with students and an interpretive and hermeneutic way of relating theory to practice.

Furthermore, this article lends support to the approach to the construction of powerful educational knowledge advocated by Barrett and Hordern (this issue). As they argue, the construction entails ‘the development of a distinctly educational modus operandi based around some specifically educational questions’. Those questions then ‘provide the “recontextualisation principle” (Bernstein, 2000) by which knowledge would be selected and transformed from relevant singulars (e.g. philosophy, sociology, psychology and history and possibly others) to inform and enlighten the study of education and conceptualise educational practice’. This approach is largely compatible with what I have argued about the construction of powerful curriculum theory. The construction needs to be directed to and animated by a vision of education. The vision of education serves to inform our identification of the ‘educational’ questions pertaining to practice. Those educational questions, in turn, determine what external theories are to be employed to interpret, analyse and theorise about practice (see Deng, 2013, 2015). This article strengthens their approach by calling for the employment of Schwab’s the eclectic arts with respect to the use of external theories in developing educational knowledge, and by calling for educational theorists to ‘stay close to practice’ and in which find ‘their productive centre of imagination, their source of knowledge’ (Künzli, 2013, p. 673).
However, while Barrett and Hordern see education as a ‘region’—an applied field like engineering or medicine (also see Hordern, 2017), I argue that education is a ‘singular’—a ‘practical’ discipline that are more like politics or ethics centrally concerned with human deliberative practice for public good. This argument can be developed through invoking Schwab’s the Practical which, albeit developed to tackle the crisis in curriculum theory, is generally applicable to attacking the crisis in educational theory. As a matter of fact, the Practical was developed from an attempt to redirect educational studies away from the ‘theoretic’ undertaking – centred on the pursuit of disciplinary understanding of education – and toward the ‘practical’ endeavour – centred on the improvement of education in practice and in the actual world of schooling (Westbury, 2005; Ruzgar, 2018). The principal foil employed by Schwab is the Aristotelian distinction between the forms of knowing associated with theoretic disciplines (such as mathematics and physics) and practical disciplines (such as politics and ethics). Applied to the development of educational theory, it can be argued that Education has been inadequately positioned as an academic field of research in which forms of theory and theorising are ‘generated through “other” disciplines’ (Biesta, 2011)–such as psychology, sociology, philosophy and history. There is hence a need to reposition Education as a ‘practical’ discipline where forms of theory and theorising are centrally concerned with issues pertaining to practice and the world of schooling, informed and animated by a vision of what education should be.

This argument can be made more explicitly by applying Schwab’s (1970/2013) medical framework – symptoms, diagnosis and prescription – to discuss the current crisis in educational theory and sketch out a resolution to the crisis.

- Symptoms. Educational theory is ‘moribund’. Among the symptoms of moribundity are: (1) ‘the increasing encroachment of organisations outside higher
education on educational knowledge production’ (Hordern, 2018, p. 797); (2) an upward flight to ‘exotic’ and ‘fashionable’ discourses like postmodernism, poststructuralism and postcolonialism, (3) a rapid decline in funding for disciplinary knowledge production, and (4) an increasing margination of educational theory by policymakers and school practitioners because of its irrelevance to practice and to the world of schooling (Furlong, 2017).

- **Diagnosis.** The moribundity has to do with the fact that Education has been inappropriately positioned as multi-disciplinary academic studies which see the development of disciplinary understanding as the primary goal, with principles and methods borrowed from foundational disciplines and related sources (for this positioning, see Biesta, 2011; McCulloch, 2017; also see Barrett & Hordern, this issue). Because of the inadequate positioning, educational theory has become increasingly irrelevant and impractical to the work of schoolteachers and practitioners (c.f. Labaree, 2006; McCulloch, 2017). The field is ‘experiencing a crisis of principle’. ‘It is unable, by its present methods and principles, to continue its work and contribute to the advancement of education’ (Schwab, 1970/2013, p. 606).

- **Prescription.** The widely prevalent and taken-for-granted belief about Education as multi-disciplinary academic studies must be questioned and challenged. If education theory is to have an impact on practice and education, Education ‘requires new principles which will generate a new view of the character and variety of its problems. It requires new methods appropriate to the new budget of problems’. The new principles and new methods are found in ‘the practical, the quasi-practical and the eclectic’ (p. 592)
In short, to produce powerful professional educational knowledge that can have an impact on practice and contribute the advancement of education, Education needs to be positioned as a distinctive discipline in its own right. This discipline is centrally concerned with issues pertaining to practice and the actual world of education and schooling, with a profound vision of what education should be. It needs to develop its own distinct forms of theory and theorising that is grounded in and informed by educational and social scientific research and embraces theories from foundation disciplines and related fields (economics, international and comparative education) in an eclectic, critical and creative manner (see Schwab, 1971; Deng, 2018). The German Didaktik tradition, together with Schwab’s the Practical, provides a promising approach to revitalising educational theory (and curriculum theory) in the current times.

Acknowledgements

The author would like to express sincere gratitude to Ian Westbury for his useful comments on an earlier version of this article, and is very grateful for the meaningful comments of three anonymous reviewers.

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