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To cite this article: Cathal de Paor (2021) *The Curriculum* in an era of global reform: Bobbitt's ideas on efficiency and teacher knowledge, *Journal of Curriculum Studies*, 53:3, 270-278, DOI: [10.1080/00220272.2021.1888389](https://doi.org/10.1080/00220272.2021.1888389)

To link to this article: <https://doi.org/10.1080/00220272.2021.1888389>



Published online: 12 Feb 2021.



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The Curriculum in an era of global reform: Bobbitt's ideas on efficiency and teacher knowledge

Cathal de Paor

ABSTRACT

Over a hundred years later, *The Curriculum* by John Franklin Bobbitt continues to be relevant for understanding contemporary issues in education. One issue has been the association with elements of reform such as scripted curriculum programmes and high-stakes standardized testing. This article argues that while Bobbitt's message was one of scientific management and efficiency, this was to be pursued in a particular kind of way, quite distinct from that used in industry, and involving an extended role for the teacher. Bobbitt sought to create the conditions for a more humanizing education experience, in the pursuit of the greater human welfare and a more democratic society—quite different from the outcomes inherent in contemporary global educational reform. The article offers a close reading of *The Curriculum*, drawing in particular on Knoll's recent work on the concept of efficiency, together with a typology of the kind of knowledge which teachers need to teach well. Using this twin framework puts Bobbitt's legacy in a different light, and shows the need to take account of the full range of his ideas. Doing so can offer better insight into challenges in education over a hundred years later.

KEYWORDS

Curriculum; Bobbitt; global reform; efficiency; teacher knowledge

Introduction

Over a hundred years later, *The Curriculum* (Bobbitt, 1918) continues to be relevant for understanding contemporary developments in education. The publication has been foundational, considered by many to be 'the first major book on curriculum'. Pinar et al. (1995) use it to mark the beginning of a distinct period in curriculum studies lasting decades, as captured in the memorable line: 'Curriculum development: Born: 1918. Died: 1969' (Pinar et al., 1995, p. 6). This also links its demise to Schwab's call for a more eclectic and theoretically sophisticated curriculum scholarship (Schwab, 1969). The context for Bobbitt's writing was an expanding and reforming schooling system in North America at the beginning of the twentieth century. Bobbitt's legacy has endured, both through his publications and through the work of influential associates who have come along in the meantime, chief among them being Ralph Tyler, 'typically cited as among Bobbitt's intellectual progeny' (Hlebowitsh, 2005, p. 79).

As the world of education today navigates through an era of global reform, Bobbitt's ideas have been associated with various elements, for example, 'advocacy for competency-based instruction, and even in recent support for curriculum mapping strategies and test-driven curricula anchored in hyperspecified curriculum standards' (Hlebowitsh, 2005, p. 74). In particular, high-stakes testing has enabled the comparison, ranking and competition that provides the foundation on which other reform is built (Verges et al., 2019). Other elements of reform include:

the increasing focus on 'standards and accountability'; measurable 'outcomes' and quantitative measures of 'school improvement', 'teacher quality' and 'teacher effectiveness'; 'evidence-based' education and 'data-driven' decision-making; 'alternative routes' to teacher certification and fast-track 'residency models' that bypass or minimize university coursework; 'value-added' models and standardized teacher performance assessments; and the outsourcing of curriculum, professional development, and teacher evaluation to commercial vendors, consultants and private-sector 'partners.' (Brass & Holloway, 2019, p. 3)

These developments, part of the private sector logics that have migrated into education through New Public Management (Anderson & Herr, 2015), have been described as a Global Educational Reform Movement or GERM (Sahlberg, 2012), where 'symptoms' such as competition and choice become the main means to improve education (Fuller & Stevenson, 2019). Increased school choice promotes market-style competition as schools seek to attract parents. School inspections and evaluation of teacher effectiveness discourage co-operation between schools. This increases 'teaching to the test', narrows curricula to prioritize reading and mathematics, and replaces pedagogy with mechanistic instruction. The curriculum becomes standardized to fit international tests, and students use learning materials from the same global providers. Schools are given more autonomy and expected to show initiative, but the accompanying accountability compounds the difficulties. All of this has implications for teachers, producing 'new kinds of teaching subjects, new forms of subjectivity' (Ball & Olmedo, 2013). Teachers are governed by performativity, defined as, 'a technology that relates effort, values, purposes and self-understanding directly to measures and comparisons of output' (Ball, 2013, p. 12), which has adverse consequences on teacher morale as well as on teachers' capacity to focus on their teaching.

This raises particular questions regarding the association with Bobbitt, given that enabling teachers to focus on their teaching was one of the main reasons why he sought a more efficient system of curriculum planning in the first place. While many features of global reform such as the focus on outcomes is part of Bobbitt's message, the overall impact seems very much at odds with the pursuit of general human welfare and democracy, which Bobbitt sees as the ultimate goal of education, as he expresses it in *The Curriculum*.

This article considers this question by exploring aspects of Bobbitt's views on education as they relate to contemporary developments. Doing so will provide further context for understanding Bobbitt's association with contemporary education reform, helping to derive best benefit from what he has written. It focuses in particular on how he considered the pursuit of efficiency through scientific management could be compatible with the kind of humanistic and democratic education that he sought, which seems quite different to the direction global reform is taking. Secondly, it considers the role he envisaged for the teaching profession in achieving that. The article conducts this examination through a close reading of *The Curriculum* using a combination of two conceptual frameworks—Knoll's work on efficiency and a contemporary typology of teacher learning (Cochran-Smith & Lytle, 1999). Although emanating from very different contexts, having very different purposes, they are used in tandem in order to gain insight into how Bobbitt saw the professional role of teachers in an education system characterized by scientific management.

To continue the point, and before beginning that examination, it is worth acknowledging that capturing the essence of Bobbitt's writing is not the easiest of tasks. Apart from taking account of the very different context in which he was writing, the reader must also contend with the evolution in his ideas. For example, while writing initially that education should be seen as preparation for the future he later expressed the view that it should be 'an end in itself' (Bobbitt, 1924; Eisner, 1967, as cited in Wraga, 2016, p. 569). Studies have even led to the identification of two phases of educational thought: 'Bobbitt seemed to undergo a change of heart in the latter half of the 1920s, and in still later work (especially Bobbitt, 1941) he turned very much in a Deweyan direction' (Willis et al., 1993, p. 164). Based on the views he expressed in a final book that year (Bobbitt, 1941), Null has opted for this as the dividing line between both phases, while also considering it possible that many of these later ideas may have 'existed throughout Bobbitt's career, and current historical understanding

conceals these concepts' (Null, 1999, p. 40). The close reading of *The Curriculum* offered in this article can be seen as a response to the call from Null who writes: 'To grasp the complexity of the curriculum history field, scholars should consider the full range of ideas expressed by those who merit study' Null (1999, p. 35).

Efficiency—the humanistic view

Firstly, the manifold and often competing interpretations of efficiency need to be recognized. There have indeed been attempts to illustrate this, most recently by Knoll (2009) who writes that 'efficiency—or social efficiency—was a term beset with disparate connotations (Knoll, 2009, p. 382).' He traces the history back to Benjamin Kidd in the UK in 1894, who first introduced it as an integral, self-contained concept, imbued with democratic values and humanitarian ideals even before it became part of US educational discourse. Knoll criticizes historians of education for having adopted a narrow, utilitarian usage of the term over subsequent decades, laying some of the blame on Drost (1967) for perpetuating the 'contention that there exists an antagonism between efficiency, social stratification, and vocationalism on the one hand and democracy, equal opportunity, and liberal education on the other (Knoll, 2009, p. 363).'

Knoll notes the omission of Dewey in the telling of the story of social efficiency and attributes this to how the concept was perceived. For example, he is critical of Krug (1964) for being 'very hesitant' to put Dewey among its proponents and for having 'never mentioned the central place the term occupied in Dewey's *Democracy and Education*' (Knoll, 2009, p. 383). And yet as Knoll illustrates, Dewey wrote extensively about social efficiency, which he understood as follows:

In the broadest sense, social efficiency is nothing less than that socializing of mind which is actively concerned in making experiences more communicable, in breaking down the barriers of social stratification which make individuals impervious to the interests of others. (Dewey, 1980 [1916], p. 127, as cited in Knoll, 2009, p. 379)

Dewey and most of his contemporaries, which includes Bobbitt, used 'social efficiency' to express all the ideals they aimed at in education, including 'communication and participation, interaction and co-operation, social intelligence and social service' (Knoll, 2009, p. 381).

Returning to *The Curriculum*, it is when addressing the 'human element' that we find the greatest expression of these democratic ideals, for example, when Bobbitt refers to the 'broad, generous, and vitalized national consciousness which alone can provide a spirit of mutual service on the part of all of the constituent portions of the nation' (Bobbitt, 2018, p. 159). This brings us to the efficiency that Bobbitt believed scientific management should bring about, which he explains by differentiating between two kinds. The first kind of efficiency, which he rejects, was focused on making the process efficient in financial terms with no regard for how society benefits, i.e. 'measured by the amount of economic product' and 'selfishly misused so as to produce or to permit continuing human ill-fare instead of welfare' (p. 87). In what he terms the 'humanistic view,' Bobbitt advocates for a second kind of efficiency geared towards 'the promotion of the general human welfare' and 'the quantity of human service:'

Whereas the narrow view looks at the material product as the finished product, this humanistic view sees the finished product only within those human results that arise from the use of the economic product. The latter is a means; not an end. (Bobbitt, 1918, p. 87)

In early twentieth-century education, in an age of 'massification', a look to industry is understandable. But Bobbitt was doing so to learn, not to emulate. He seems adamant that any gains in material efficiency were to be consistent with, and further enable the pursuit of human welfare. The 'humanistic view' constitutes, therefore, the basis upon which Bobbitt argues for efficiency, where 'efficient management of the social factors is as vital as technical efficiency' (Bobbitt, 1918, p. 87). This shows that Bobbitt's view of efficiency was quite different to what Taylor sought to do in industry. The distinction between both is important when considering how Bobbitt's ideas relate

to current global educational reform, for example, in the association with high-stakes standardized testing (Au, 2011, p. 39). While Bobbitt's book is full of references to industry, Bobbitt was critical of the Taylorian system: 'The relative failure of the Taylor System seems to result from insufficient attempt to enlist the intelligence and initiative of the men' (Bobbitt, 1918, p. 84). It failed because the workers, 'are not expected to do any thinking or judging or deciding; this is all done for them; they are only to obey orders (p. 83). In Bobbitt's estimation, Taylor's system 'represents a halfway step, however, toward actual and inevitable scientific management (p. 84).' To suggest that Taylor had only reached half-way might indeed sound as if Bobbitt was even more extreme. Instead, Taylor's scientific management did not belong in education because it needed to take greater account of 'the human element'.

Bobbitt's use of the scientific idiom may have served to divert attention away from the more fundamental humanistic message shown above. As Kliebard suggests, Bobbitt was 'not explicitly aware of such a political use of technical language ... he seems simply to have believed that science had the key that ideal speculation and even philosophy failed to provide' (Kliebard, 2003, p. 20). His use of the industrial metaphor is also a factor, for example, his characterization of children as the 'ultimate workers' (Bobbitt, 1918, p. 84)—even though the point of that metaphor was to extol the virtues of active learning, i.e. that children should be as actively engaged in classroom learning as workers in industry.

Bobbitt is convinced therefore about the merit of scientific management to achieve efficiency, writing that: 'One aspect of humanistic education must be the development of that degree of physical efficiency without which such education lacks a fundamental condition of success (p. 178). This is quite different to the kind of education that comes to mind in global reform.

Teacher knowledge

This brings us to an analysis of the kind of teacher that Bobbitt envisaged, using a typology of teacher learning developed by Cochran-Smith and Lytle (1999). This comprises three categories of knowledge 'which teachers need to teach well' Cochran-Smith and Lytle (1999, p. 250). In summary, the first conception, 'knowledge-for-practice' relates to the formal knowledge and theory produced by experts. The second conception, 'knowledge-in-practice', is practical knowledge, as it is embedded in the practice of expert teachers and in their reflections. Knowledge in the third conception is not based on a distinction between what is formal and practical, but rather is available through teachers' own enquiry. In this case, teachers 'treat their own classrooms and schools as sites for intentional investigation at the same time that they treat the knowledge and theory produced by others as generative material for interrogation and interpretation' (Cochran-Smith & Lytle, 1999, p. 250). These three conceptions represent different ideas about teacher's practice and how it should be improved. The framework can therefore provide insight into how Bobbitt characterized good teaching and to how this compares to the kind of teaching that follows from global educational reform.

Knowledge-for-practice

Starting then with the first conception, knowledge-for-practice, Bobbitt is clear that it was their knowledge of 'educational science' that was to determine their action in the classroom, rather than having others such as the principal dictate to them:

Each teacher is, so far as possible, to be his own coordinator. Otherwise there can be no efficiency in organization labors. The principal cannot be always at the elbow of every teacher dictating every coordinating adjustment. It is educational science that must preside at every teacher's desk and do the dictating. (Bobbitt, 1918, p. 80)

But apart from the scientific knowledge of teaching, knowledge-for-practice can also be taken to include a knowledge of the theory of curriculum, and all it entailed:

we have discerned that there is a theory of curriculum-formulation that is no less extensive and involved than that of method; and that it is just as much needed by teachers and supervisors. To know what to do is as important as to know how to do it. (Bobbitt, 1918, p. v)

Equipping teachers with the theory of curriculum is what provided the impetus for the book in the first instance, i.e. 'designed for teacher-training institutions as an introductory textbook in the theory of the curriculum; and for reading circles in the training of teachers in service' Bobbitt (1918, p. v).

Knowledge-in-practice

This brings us to the second point in relation to the teacher's role. Using italics for further emphasis, Bobbitt declares that the teacher's most fundamental task must be to 'know the pupils,' which as he then explains requires different 'know how' related to pedagogy and educational science. i.e. the 'human element' as he elaborates here. Teachers are to use that personal knowledge, together with educational science (from the previous category), to 'adjust the conditions of the work to child-nature' (p. 85). This would leave teachers with the space to know the pupils, their needs, interest and potentialities, and how to motivate them intrinsically.

'they must know the pupils [italicised as in the original]: know their varying mental capacities, their interests, their aptitudes and abilities, their states of health, and their social milieu. They must know how to arouse interest; how to motivate them from within; how to adjust the conditions of the work to child-nature; how to keep up an abundant physical vitality in the children; and how to employ community influences for vital stimulation of the pupils. (Bobbitt, 1918, p. 85)

Putting this in context, it seems quite distanced from the subjugation and teaching-to-the test associated with contemporary global reform cited (Ball, 2013). And yet, this side to Bobbitt's philosophy does not feature so much in commentary. Eisner notes for example, that unlike the progressives, 'Bobbitt placed much more reliance on the use of principle, science, and specificity; the Progressives more emphasis on art and the idiosyncratic aspects of instruction' (Eisner, 1967, p. 41). And while Labaree does indeed categorize Bobbitt as a progressive, it is an administrative progressive, rather than a pedagogical one, which he distinguishes as follows

What held the pedagogical progressives together was a common romantic vision, but the vision that held the administrative progressives together was strictly utilitarian. And whereas the former focused on teaching and learning in the classroom, the latter focused on governance and on the structure and purpose of the curriculum. (Labaree, 2005, p. 281)

While *The Curriculum* does indeed illustrate progressivism in governance and the purpose of curriculum, this would enable the teacher to focus on pedagogy. Labaree also makes the point that administrative progressives wished to move schooling in the direction of 'social reproduction rather than social opportunity' (Labaree, 2005, p. 288). But there is plenty in *The Curriculum* that points to a more constructive and indeed transformative kind of teacher role as shown in the next section.

Knowledge-of-practice

A key idea in the final conception of teacher learning, Knowledge-of-practice is that teachers learn when they 'generate local knowledge of practice by working within the contexts of inquiry communities to theorize and construct their work and to connect it to larger social, cultural, and political issues (Cochran-Smith & Lytle, 1999, p. 250).

What may be most illustrative of knowledge-of-practice and Bobbitt's commitment to education for societal construction, as opposed to adaptation to the status quo, is an example he gives on the teaching of history. This relates to the history of railroad regulation, which Bobbitt urges, should be taught so as to reveal 'the self-seeking character' of the powerful railroad companies and 'of the fight made by the public by way of resisting such powerful predatory attacks.' In order to successfully

teach the lesson, it is apparent that teachers would not get very far with a scripted curriculum. Instead, they would need to act out of their own deeply held conviction and commitment to social justice and community activism:

Like all the rest, this, too, should be no dull sociological chronology and analysis, but a living reconstruction of spirited group-conflict. [...] this wider consciousness that made the fight originally must be reconstructed and reexperienced in the youthful fighter. He will be thereby shaped for that continuing general community consciousness that must continue the fight in whatever form it may nowadays arise. (Bobbitt, 1918, p. 139)

Also included in knowledge-of-practice is 'enquiry as stance' where 'teachers search for significant questions as much as they engage in problem solving' (Cochran-Smith & Lytle, 1999, p. 293). Bobbitt also alludes to this, as for example, when he writes about the need for teachers to avoid routine and to 'think out new problems.'

A large portion of our profession appears to need something that will lift them out of the grooves of routine traditional thinking—or rather out of an imitation that is not thought—and which will so obliterate the grooves that their minds will be free to think out new problems. (Bobbitt, 1918, p. 284)

There are also references to the extended role of the teacher who engages with colleagues beyond the classroom in two of the metaphors he uses. The first relates to how he saw the teacher working in consort with teaching colleagues and with management. In the orchestra, while musicians are specialists in a particular instrument, they must know enough about music to make the collective performance a success. Similarly, teachers needed to act as specialists while being trained to think as generalists in the work of the entire school:

'The teacher is, therefore, to be a specialist in one thing and a generalist in all. Having operative skill in one thing, he needs nothing more than the generalist's skill in the others. He needs to think all, but not to do all. For his thinking he needs to be trained in the work of the entire organization. (Bobbitt, 1918, p. 80)

The metaphor of the shoemaker further develops this idea. While the traditional shoemaker was master of the entire craft, this has been divided into disparate functions in the modern shoe assembly line where, 'The men along the line are but fingers and wheels and levers in one large shoemaking machine.' Bobbitt criticizes a similar trend happening in schools, which has resulted in the exclusion of teachers:

Superintendent and principal, therefore, lay out the courses of study, choose the books, supplies, and equipment, and direct the methods. The supervisory brain, so to speak, does the thinking for the whole organization; the teachers are but hands and voices to this brain. (Bobbitt, 1918, p. 78)

However, he notes that a change is underway, and declares with satisfaction that, 'this feudal theory is being supplanted rather rapidly by a democratic theory . . . it is not the superintendent or principal who takes the place of the general teacher of a century ago, it is the total group (p. 78).' In other words, teachers as a collective were to think the overall provision. This was not just about creating a 'more effective directive agency' (p. 79), because the collective action would also see them engage beyond the school and in the community, including:

primarily members of the adult community, associated with the parents and leaders of that community. It is to get them out of the schoolroom into the larger life of affairs. It is to give their schoolroom labor its proper place in the total scheme of community affairs. (Bobbitt, 1918, p. 188)

The range of teacher knowledge across the three categories shows how Bobbitt envisaged a teacher role that is rooted in educational science, but is ambitious and transformative, and quite different to that inherent in contemporary global reform.

Discussion

Bobbitt combines two ideas that seem to come from two very different places, on the one hand, the exactitude of scientific management, and on the other education in terms of human service for social transformation. The former was needed to enable the latter. Rather than being detrimental then, Bobbitt's scientific management and efficiency would enable teachers create a more humanistic and democratic world. This is similar to the call today from UNESCO for greater efficiency as a means of advancing the greater good. For example, 'the call for a humanistic rethink' in *Rethinking education: towards a global common good?* is to be accompanied by a 'more efficient use of these limited resources; to ensure greater accountability' (UNESCO, 2015a, p. 68). While a humanistic approach 'takes the debate on education beyond its utilitarian role in economic development' UNESCO (2015a, p. 37), this document still acknowledges the role that efficiency can play in pursuing that. And with regard to teachers, the teacher target in Sustainable Development Goal 4 affirms the importance of efficient and effectively governed systems of education for teachers:

As teachers are a fundamental condition for guaranteeing quality education, teachers and educators should be empowered, adequately recruited and remunerated, motivated, professionally qualified, and supported within well-resourced, efficient and effectively governed systems. (UNESCO, 2015b)

While writing in a very different context, it seems as if Bobbitt's words can be used to support a different kind of global reform. The book was wide-ranging, outlining the philosophical base for a humanistic education, drawing on scientific management, and which was later operationalized in the follow-up, *How to make a curriculum* Bobbitt (1924). That he should write *The Curriculum* with such a broad scope shows just how conversant he expected them to be with the why of curriculum—not just what and how. These big knowledge questions are relevant today more than ever as part of knowledge-for-practice.

Worth bearing in mind is the fact that as Schubert (1980) notes, during this period the need for full time experts to engage in specialized decision-making was emerging in many occupations. He notes that 'full-fledged curriculum developers were not yet present, although they were on the horizon and would quite fully present themselves in the next decade' (1980, p. 16). However, as shown here, teachers were still to have a role in curriculum development and needed to be knowledgeable about this. This also gives context to what he wrote in an earlier work that the supervisory staff 'has the largest share of the work in the determination of proper methods . . . The burden of finding the best methods is too large and too complicated to be laid on the shoulders of the teachers' (Bobbitt, 1913, p. 52). Having others do the bulk of the work in determining proper methods need not be interpreted as a diminution in the role of teachers but would see them free to invest themselves in more important work, i.e. to know the pupils. In other words, knowledge-in-practice would provide the basis for teachers to become, 'makers of wise judgments and designers of rich learning interactions Cochran-Smith and Lytle (1999, p. 250).' As for the third and final conception, and to recall the words of Cochran-Smith and Lytle cited earlier, Bobbitt expected teachers to connect their local knowledge-of-practice to 'larger social, cultural, and political issues', as illustrated in the example on the teaching of history. While the language of the 'fight' and 'consciousness' is not usually associated with Bobbitt, it seems no different to the call by Ball and Olmedo (2013) for today's teacher to occupy 'the terrain of struggle, the terrain of resistance' in challenging contemporary power relations and 'the how(s) of power inside and around him or her.' For these authors, doing so is an act in reclaiming teacher identity and in self-care.

It is then that he or she can begin to take an active role in their own self-definition as a 'teaching subject', to think in terms of what they do not want to be, and do not want to *become*, or, in another words, begin to *care for themselves*. Such care also rests upon and is realised through practices, practices of critique, vigilance, reflexivity, and of writing. (Ball & Olmedo, 2013, p. 86)

As unlikely as it may sound therefore, Bobbitt's spirit may be more about resisting global education reform, than promoting it.

Conclusion

With its focus on both efficiency and teacher knowledge, the article has shown how Bobbitt's writing can be read as a resistance, rather than an endorsement of that kind of reform. Firstly, *The Curriculum* reveals a commitment to a humanistic education that Bobbitt believed scientific management would enable, through the pursuit of a physical efficiency. This was needed, he believed, to achieve the general human welfare. And crucially, while Bobbitt sought to learn from industry, his humanistic view of efficiency was quite distinct, pursued in ways that included the various democratic ideals associated with social efficiency noted earlier—'communication and participation, interaction and co-operation, social intelligence and social service' (Knoll, 2009, p. 381). While Bobbitt may have, as Willis et al. (1993) put it 'turned very much in a Deweyan direction in later years, the analysis shows that even in *The Curriculum*, Bobbitt was already expressing a philosophy of education more generally associated today with Dewey.

Secondly, the range of the teacher knowledge expected of teachers, as illustrated using the framework from Cochran-Smith and Lytle (1999), shows the vital role teachers were to play in achieving this. Teachers were to know their pupils, using that personal knowledge as well as educational science to dictate their actions in the classroom, while also thinking and acting across the school and into the community, developing a 'community consciousness' needed for social construction and the general human welfare. Again, this suggests a vitality and engagement that is very different to the subjugated profession associated with contemporary global reform (Ball, 2013).

To begin the conclusion, we may return to the beginning of *The Curriculum*, where Bobbitt refers to aspects of social progress that he has observed in early twentieth century. These include scale, specialization, interdependency, democracy, civilization and humanization. He then lays down his ambition for education: 'As the world presses eagerly forward toward the accomplishment of new things, education also must advance no less swiftly' (p. iii). This humanistic education is quite different to the kind that inherent in contemporary global reform. The challenge today is to use reform to enable that advance, working for the greater human welfare. This makes it necessary to consider the why questions that Bobbitt raised, not just the what and the how, when using his work over a hundred years later.

Disclosure statement

No potential conflict of interest was reported by the author.

Notes on contributor

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