“We Brought It Upon Ourselves”: University-Based Teacher Education and the Emergence of Boot-Camp-Style Routes to Teacher Certification

Daniel Friedrich
Teachers College Columbia University
USA

Citation: Friedrich, D. (2014). We Brought It Upon Ourselves: University-based Teacher Education and the Emergence of Boot-Camp-Style Routes to Teacher Certification. Education Policy Analysis Archives, 22 (2). http://dx.doi.org/10.14507/epaa.v22n2.2014

Abstract: The proliferation of boot-camp-style routes to teacher certification in the last two decades is seen by many university-based teacher educators as the result of the advancement of conservative interests aimed at de-professionalizing teaching. This essay argues that this view only accounts for one piece of the answer, the other one being that some of the foundational assumptions embedded in most university-based teacher education programs actually opened the doors for the boiling down of teacher preparation to the bare minimum. By situating the psychological sciences at the foundations of pedagogical knowledge and positioning them as the privileged lens to understand the learning subject, university-based teacher education has paved the way to its own disappearance. Both traditional and alternative routes to teaching can be understood, then, as part of the same system of thought, one that needs to be cracked open in order to be able to imagine other possibilities.

Keywords: Teacher education; alternative teacher education programs; psychology; democratic education.

“We provocamos nosotros”. La formación docente universitaria y la emergencia de programas alternativos express hacia la certificación docente.
Resumen: La proliferación de programas alternativos express de certificación docente en las últimas dos décadas es vista por muchos formadores docentes basados en universidades como resultado del avance de intereses conservadores que apuntan a la desprofesionalización de la docencia. Este ensayo propone que esta lectura solo da cuenta de un aspecto de la cuestión. El otro es que algunas de las suposiciones fundamentales presentes en la mayor parte de los programas de formación docente tradicionales universitarios son las que abrieron la puerta a la reducción de la formación docente al mínimo posible. Al situar a la psicología como fundación del conocimiento pedagógico, y al posicionarla como la lente privilegiada para entender al sujeto que aprende, la formación docente tradicional ha establecido las bases para su propia desaparición. Tanto la formación docente tradicional como los programas alternativos, entonces, pueden ser vistos como parte del mismo sistema de pensamiento, el cual requiere ser desensamblado para poder imaginar otras posibilidades.

Palabras-clave: Formación docente; programas alternativos de certificación docente, psicología, educación democrática.

“Nos mesmos que provocamos”. A formação docente universitária e o surgimento de programas alternativos express para a certificação docente.

Resumo: A proliferação de programas de certificação docente “express” nestas últimas duas décadas é percebida por muitos formadores docentes de base universitária como resultado do avanço de interesses conservadores que apontam a desprofissionalização da docência. O presente ensaio propõe que esta leitura somente abrange um dos aspectos da questão. O outro consiste em que algumas das suposições fundamentais implícitas na maioria dos programas universitários tradicionais de formação docente são, efetivamente, as que abriram as portas à redução da formação docente ao mínimo possível. Ao situar a Psicologia como fundamento do conhecimento pedagógico e posicioná-la como a lente privilegiada para entender ao sujeito que aprende, a formação docente tradicional estabeleceu as bases da sua própria extinção. Tanto a formação docente tradicional quanto os programas alternativos podem, então, serem vistos como parte do mesmo sistema de pensamento, que precisa ser totalmente aberto para permitir imaginar outras possibilidades.

Palavras-chave: Formação docente; programas alternativos de certificação docente; psicologia; educação democrática.

Introduction

We’ve got to avoid the sacralization of the social as the sole instance of the real, and stop treating thought – this essential thing in human life and human relations – lightly.

~Michel Foucault (1982, p. 33)

Perhaps one of the more pressing issues in the field of teacher education right now is the proliferation of alternative routes to teacher certification over the last two decades, which for some scholars seem to threaten not only traditional teacher preparation institutions that have been

---

1 I would like to thank my Research Assistant, Erica Colmenares, for her invaluable help in sorting through the bibliography and being an insightful sounding board for the ideas presented in this article. My friend and colleague Tyson Lewis has also provided thoughtful feedback on earlier versions of this paper.
hegemonic in the last century\textsuperscript{2}, but the very future of schools themselves. Some of these alternative, “boot-camp-style” routes to teacher certification boil teacher education down to a minimum – spending a few weeks, maybe a summer, passing on what they consider to be the “basics” to prospective teachers before or while assigning them to a classroom as monitored, yet full-time instructors (Mitchell & Romero, 2010). The individuals selected into these programs, usually college graduates with strong academic performance or “significant life experiences,” are offered a quick way to a profession that provides certain financial stability and in some cases a sense of duty or civic commitment without the economic costs or time investment of a traditional program (Zumwalt, 1996). Alternative paths to teacher certification, broadly defined as those outside university-based programs, have always played a role in educating teachers in the United States\textsuperscript{3}. Only in the brief period between 1960 and 1990 did universities hold an almost monopoly in teacher education (Zeichner & Hutchinson, 2008). Since the mid-1980s, there has been an increase in programs not based in universities and colleges, and by 2009, 59,000 teachers were certified by such programs (National Center for Alternative Certification, 2010), present in all 50 states and the District of Columbia. Zeichner and Hutchinson (2008) enumerate various reasons for this boom in the last two decades: teacher shortages -both real and projected- in critical areas, the desire to attract people who would normally not go into teaching, and dissatisfaction with traditional teacher preparation.

While there are clear differences between the most reputed traditional or university-based teacher education programs and the kind of alternative routes to certification exemplified by Teach For America (TFA) or the newly established Relay Graduate School of Education\textsuperscript{4}, there are also differences within each program type.

In general, the new programs tend to treat teaching as a set of empirically proven techniques that can be reduced to their core elements and reproduced (McConney, Price, & Woods-McConney, 2012). These techniques are added to the content knowledge that college graduates bring with them, to produce “highly qualified teachers” that are then deployed to urban and rural classrooms, where they will become better teachers by teaching.

Meanwhile, most established traditional teacher certification programs, comprised mainly of four-year colleges but also of post-baccalaureate programs, claim to conceive of teaching as much more than mere techniques. Following the mission statement of one of America’s oldest and most prestigious teacher education institutions, Teachers College, teachers are understood as inquirers, curriculum makers, and social justice advocates (Teachers College Accreditation Team, 2003), linking teacher education to a democratic understanding of a more just society. Whereas mission statements differ across institutions, what all of them would seem to agree on (by virtue of their extended structure and pre-service components) is the impossibility of producing high quality teachers by condensing what teaching is about into a few weeks dedicated to developing technical skills. Teaching is a very complex activity, which thus requires a complex understanding of it to

\textsuperscript{2} Colleges and universities have coexisted with different paths to teaching since the emergence of mass schooling in the 19th century (Fraser, 2007), yet they became hegemonic in the course of the 20th century (Kliebard, 2004; Lagemann, 2002). While the history of different teaching certification pathways is certainly fascinating (see e.g Fraser, 2007; Grossman & Loeb, 2008; Zeichner & Liston, 1990), for the sake of the argument I am proposing in this paper, I will not dwell in this history. Instead, I mobilize the emergence of a particular type of ARTC in the last few decades as a catalyst for a critique of the foundations of the ways in which we think about teacher education in general, and in university-based programs in particular.

\textsuperscript{3} Especially when one considers that the label “alternative” has been used to describe anything outside a four-year college, including, for example, post-baccalaureate studies.

\textsuperscript{4} \url{www.relay.edu}
achieve success at its goals. Clearly, the range of teacher education institutions and programs is vast, and not all of them fall into these two poles.

Within this apparent binary, the proliferation of boot-camp-style alternative routes to teacher certification (ARTC) has been seen by most scholars in the field – the vast majority of them hosted by traditional teacher education institutions – as an effort by political conservatives to: a) de-professionalize teachers and teacher education; b) enforce the rules of free-market onto education; c) undermine the power of unions and other progressive agents with influence over schools; and d) ultimately destroy public education (see e.g. Labaree, 2010; Laczko-Kerr & Berliner, 2002; Swalwell & Apple, 2011; Zeichner, 2010). For ARTC critics, programs such as TFA or the Relay School’s Teacher U⁵ represent the dangers in contemporary trends of educational reforms that push towards standardization in education, a technical-managerial notion of accountability (Biesta, 2004), result in deeper inequalities, and present committed teacher educators with a significant obstacle towards a more just and democratic future for all. As these scholars indicate, the attacks on comprehensive teacher education are one more expression of the neoliberal redefinition of the role of the state vis-à-vis the private sector. By dismantling the foundations of teacher education – critics claim- these programs and the reforms they represent undermine the democratic goal of educating critical teachers who would then go onto educating critical students.

Aside from where one stands in regards to these ARTC⁶, the argument that these programs stem only from an advancement of right-wing conservatives is missing a key piece that – as painful as it may be for some critics to recognize – needs to be explored and accounted for. The benefit of carefully examining teaching and teacher education is the ability to fight against new trends and old habits in a more thoughtful and discerning way. The obscene reduction of teacher education to the transmission of homogenized techniques and skills in as short an amount of time as possible, short of a simple PowerPoint presentation and a hand-out, can be seen as much a consequence of the advancement of certain conservative interests invested in a neoliberal agenda and a free-market philosophy, as an effect of certain threads within the discourses that have been circulating and dominating the field of teacher education for at least four decades. The missing piece could be summarized by saying that, at least partly, we, “progressive” university-based teacher educators, have brought this upon ourselves.

In this essay, I explore some of the discourses that have shaped the common sense of traditional and “progressive” university-based teacher educators as a way to reflect on how we have been historically conceiving of teaching and teacher education as a “practice-driven” activity, in which teachers’ thought is always of a different order. By delving into the particular ways in which discourses stemming from the psy-field⁷ have been mobilized in teacher education, both in the production of teachable content and in the construction of the learning subject, I argue that these foundations of university-based teacher education are also at the roots of ARTC programs. The goal is not to self-flagellate with inane “if only’s” and “we should have’s”, but to understand the ways in which, by framing teacher education in particular ways, the formation of educators and schools have suffered. My belief is that if those frameworks are made visible, possibilities may open up to rethink the conceptions of teaching and teacher education onto different paths.

It is important to note here that my focus on the role of the psy-field in teacher education is not fortuitous. Historically, psychology had little to do with preparing teachers until the turn of the

---

⁵ http://www.relay.edu/teacher-u/
⁶ For my own perspective on one such program outside the United States, see Friedrich, in press.
⁷ I borrow the term “psy-field” [Campo Psi] from Emanuele (2002), who uses it to denote the set of disciplines that focus on the psychological aspects of the human being – such as educational psychology, psychogenesis, developmental psychology, and others- and that have deeply influenced the field of education.
20th century. According to Kliebard (2004), it was G. Stanley Hall who inaugurated the entrance of a particular way of understanding the role of psychology in the field of education. Hall (1923) saw the need to align the curriculum with the scientific findings about the nature of the child’s mind. Dewey (1897) accepted the importance of knowledge produced by this novel field: “He was very cautious, however, about applying such study to the practical exigencies of the classroom” (Kliebard, 2004, p.44). This caution stemmed from the concern about the a-theoretical nature of the field of child studies, but most importantly, Dewey was concerned about the ways in which Hall proposed to use psychology to develop different kinds of education for different roles in society.

Dewey thus set himself against the growing tendency in educational policy not only to educate the child based on predictions of what the society would be like, but to differentiate the curriculum based on the particular role an individual would be expected to occupy in that society. (Kliebard, 2004, p.47)

A century later, Dewey’s warnings have not been heeded. As I will argue throughout this essay, the psy-field has colonized teacher education, serving as the privileged lens through which learners and content are being read. I share with Dewey the deep apprehension about the consequences of assigning such a role to the psy-field in terms of the democratic goals of schooling, as it is precisely democracy what is at stake.

First, I will explore the foundational role given to psychology in mediating the production of both educational knowledge and the understanding of the learning subject. I will show how this way of positioning psychology at the center of education is a pillar of contemporary discourses on teacher education in most, if not all, reform proposals coming from the progressive/traditional field. Afterwards, I will argue that some of the assumptions that ground what psychology is used for contain the seeds that facilitated the proliferation of programs that belittle teacher education and turn it into mere “training,” and that present obstacles for the democratic goal of using teacher education to foster a more just society. Lastly, I will interrogate what kind of teacher education would be possible if we considered the contingency of psychological foundations. In other words, what would a post-foundational, experimental teacher education look like?

On the Foundational Role of the Psy-field in Teacher Education: Teaching Methods and Knowing the Learning Subjects

Many traditional teacher education institutions, ranging from the most renowned and highly ranked to the mediocre and beyond, have clear demarcations in their course catalogs between content courses and methods courses, while other programs have replaced this distinction with pedagogical content courses that combine these two areas. When the distinction between methods and content is made, curricular content courses are intended – in best-case scenarios – to consolidate and provide new perspectives on the instructional content that future teachers are to teach. In those cases in which students have not had a good schooling experience, these courses aim at compensating for the gaps generated in primary and secondary schooling. Methods courses, on the other hand, are in charge of imparting that knowledge that is unique to education, in that they bring together findings from the field of psychology with evidence-based research on the techniques that will make instruction most effective (Shulman, 1987).^8

---

^8 Pedagogical content courses emerged relatively recently within teacher education as an attempt to bridge the gap between content and methods by providing students with tools that still fundamentally rely on the findings of educational and developmental psychology, but are more closely linked to the specificities of each discipline and grade level.
The commonsense idea about the neutrality of separating methods and content, the dominance of a particular take on psychology as cognitive science, and the naturalization of its role in contributing to the development of teaching methods and a disciplinary understanding of the learning subject as part of teacher preparation needs to be problematized in order to understand the conditions of possibility for the emergence of boot-camp-style ARTC. Linda Darling-Hammond, one of the leading contemporary specialists in teacher education, illustrates this partition using the following image (Figure 1):

Figure 1. A Framework for Understanding Teaching and Learning. Darling-Hammond & Bransford (2005, p. 11)

The distinction between content (or “knowledge of subject matter and curriculum goals”) and methods (or “knowledge of teaching”) appears then not only as natural, but as necessary for maintaining teacher professionalism. It is precisely the knowledge of these components and of their distinct division, supported by the understanding of the students’ minds (“knowledge of learners and their development in social contexts”), what makes teachers into specialists-professionals.

The importance granted to studying the workings of the mind, its development, the mechanisms through which it acquires knowledge, how it interacts with others, and how it expresses itself through language position the psy-field at the core of teacher education. I would argue that there are several assumptions that ground this role given to the psy-field:

1) *Since children are neither mathematicians, nor historians, nor biologists, the principles that order the subject matters and their teaching cannot come from those disciplines.* Most people would certainly agree

---

9 Historically, Lagemann (2000) builds an appealing argument that ties the privileged role given to psychology as the provider of empirical research in education to the transfer of teacher education from normal schools to universities in the beginning decades of the 20th century. Lagemann adds a layer to this analysis by claiming that in that move there was an effort to re-shape teachers. Universities required more formal training and more resources, thus attracting more affluent and better-educated women. Normal schools, on the other hand, were more appealing to working-class and immigrant teachers, who “were more likely to unionize than their more affluent and educated sisters, and they were more likely to have close personal and familial ties to the local neighborhood school boards that stood in the way of administrative centralization” (p. 13).
with the first part of this proposition. Children learning the principles of algebra, or thinking about the past of particular groups cannot be equated with the adults that produce that knowledge in the first place precisely for that very reason: while pupils might be constructing knowledge, they are not producing original content, at least not in the same way experts are. Now, whether or not the disciplines that serve as source for the curricular content are therefore unable to provide principles for ordering knowledge in schools is a question of a different order. I plan to address this question further down the argument.

2) The ordering of curricular knowledge has to be tied to what we know about how children learn, and therefore it has to be provided by cognitive and developmental psychology. Popkewitz (2004, 2008, 2010) discusses the translation and transformation of disciplinary knowledge into teachable content knowledge in terms of alchemy. This alchemical process of transformation re-organizes knowledge under the lens of the psychological sciences, administering content following the rules of what is known about learning and the human mind. The disciplinary debates that keep each field open (while uncertain) are turned into problems to be solved by communities of learners as they progress in their cognitive development. The solving of these problems functions as a way to inscribe certainty into uncertain disciplinary knowledge, while the teacher's unique capacity to formulate problems adequate to the student's level and provide them with the tools necessary to solve those problems at the right time establishes the adult's role as master explicator (Rancière, 1991).

3) If content knowledge is organized following principles provided by psychology, then the methods for teaching that knowledge also need to be developed by the psy-field. The fracture between content and methods that was founded by the two previous assumptions left methods as a domain colonized by the cognitive sciences. These disciplines, following the different models of the day, have been producing the knowledge that has served as the foundation for the development of pedagogical techniques supposed to be implemented by teachers, trained by experts, since the turn of the 20th century (Kliebard, 2004; Lagemann, 2000). Psychology thus became the dominant discourse in the training of educators in ways that have become so much a part of the pedagogical common sense that it is now rarely questioned. The “facts” that the mind develops in stages, that knowledge has to be structured from lower levels of complexity to higher ones, or that learning has to be supported by positive or negative reinforcements have been accepted as natural about teaching and learning. Even the steps taken to go beyond psychology, such as accounting for the “context” or the “social aspects,” or the creation of the idea of pedagogical content knowledge, are always functions of what we know about the mind and how students learn. For example, prevailing currents in developmental psychology would dictate that young children are not capable of dealing with moral ambiguity until a certain age (see e.g. Kohlberg, 1981; Smetana, 2006). As a consequence, the knowledge coming from the disciplines of history or literature is re-ordered following the guidelines provided by psychology, so that unambiguous lessons are provided to students until they are deemed ready to deal with moral ambiguity.

I would argue that these three assumptions serve as the foundations for thinking about content and methods as two separate areas of teacher education (or even their combination into pedagogical content courses), supported by knowledge about the student’s development.

10 Jacques Rancière points in *The Ignorant Schoolmaster* (1991) at the distinction between the master explicator and the emancipator. While the first one continuously re-inscribes inequality by using explication to reassert the hierarchy between him or herself and the student, the emancipator assumes the equality of intelligence and engages the will of the other to help him/her realize said equality.
The Problem with Psychological Foundations

One of the backbones of the idea of professionalizing a field lies in understanding that it possesses and produces a set of knowledge that is unique. One could hardly speak of the medical profession if one could not distinguish medical knowledge from chemistry or biology. Following this idea, many scholars who struggle to professionalize teaching point to the specificity of the knowledge produced in the field as one of the defining arguments. Within that knowledge, teaching methodology assumes a central role. Didactics, or the teaching methodology that is specific to each subject matter, brings together findings in the experimental, social, and developmental psychologies with knowledge gathered from schools and the experiences of teachers and educators in an attempt to devise the “best” ways to teach in order for students to learn: “pedagogical knowledge, that special amalgam of content and pedagogy […] is uniquely the province of teachers, their own special form of professional understanding” (Shulman, 1987, p.8).

Yet the very idea of the possibility of discovering best practices, of being able to compile the techniques that have worked, do work, and will work is certainly problematic and, as I will show, has had unforeseen consequences on teacher education.

When knowledge is translated from the different scientific or humanist disciplines into school subjects, the one element that gets “lost in translation” is the inherent uncertainty of inquiry. Even if many historians, mathematicians, or linguists have particular methodologies that provide tools for them to produce disciplinary knowledge, what they never know in advance is what that knowledge is going to look like. This uncertainty is at the heart of inquiry, and it leads both to failures (most of the time) and to groundbreaking moments. Most importantly, uncertainty remains part of the “established” knowledge; it does not dissipate. Most scientists and academics are constantly aware of the indefinite quality of the knowledge they are dealing with, even when they (consciously) act as if knowledge was certain. The ideals of positivist science are, for the most part, a thing of the past. The scientific method, which Dewey (1997) saw as “the only authentic means at our command for getting at the significance of our everyday experiences of the world in which we live” (p.88), has always been a construct more linked to how society views science and how science presents itself to society than to the scientific practice itself (Latour & Woolgar, 1986).

If knowledge produced within disciplines, which then feeds into subject matter, has some embedded uncertainty, the ways in which we tend to think about education (and for the sake of this argument, teaching methods) are all about the taming of that uncertainty in order to be able to plan the outcomes of schooling. When disciplinary knowledge is alchemically translated into curricular content, the different psychologies are deployed to provide the principles to re-order that knowledge and in that process reduce as much as possible the level of uncertainty.

But this logic does not apply only to the development of teachable content. Psychological lenses also serve to inform teachers about a significant aspect of what is there to know about students. Returning to Figure 1, “knowledge of learners and their development in social contexts” (Darling-Hammond & Bransford, 2005, p. 11) – including language, human development and learning – is part of the triad that will make people into professional educators. If schooling is about learning, then teachers would need to know about the mind, as well as the emotional variables that affect how students incorporate new knowledge, in order to tailor instruction to that mind. Seeing

---

11 Porter (1996) argues that positivist attitudes towards knowledge and its production survive only in the weaker disciplines, that is, in those that are relatively newer and feel the pressures of particular kinds of policing over their boundaries, such as psychology or sociology. On the other hand, disciplines after whose ideals the positivist models were shaped have little to do with those images. This is the case, for instance, of high-energy physics.
learning fundamentally as a cognitive process positions the psy-field uniquely as provider of knowledge about how that learning occurs.\textsuperscript{12}

The near omnipresence of developmental psychology courses in teacher education programs serves to provide prospective teachers with insights into the workings of the minds of future students. As much as teachable content has been filtered by the lens of psychology, the colonization of the psy-field over pedagogy would be incomplete without a complementary focus on how individuals learn, and how teachers can take this knowledge into account in planning their lessons. The notion of development implies a progression of sorts, be it in terms of stages (see for example the uses of Piaget in the field, which tend to overemphasize his work on stages of development over, for instance, his broader look at the history of science), or in terms of achieving deeper understandings through the use of adult scaffolding (e.g. Vygotsky). The study of the mind (as it relates to human development, the social context, and the relationship to the content being learned) leads to the possibility of anticipating how the learning subjects will react under different conditions, and to model behavior into patterns that are predictable in direct correlation to the amount of knowledge produced. The more that is known, the more accurate the prediction. Thus, what we know about human development, interactive learning, and communication is used to plan when and how students are going to learn what… with certainty. And that seems to be what the curriculum is all about.

Why is Uncertainty Important?

The question now becomes: what are the consequences of the attempts to reduce or eliminate uncertainty? There are several interrelated ways of answering that question. First, in terms of teachable content, if that uncertainty is an inherent part of the disciplinary knowledge, it is important to be aware of the fact that what we are teaching in schools, and the ways in which we order that knowledge has little to do with disciplinary knowledge – and this is not only about missing pieces that can then be added \textit{ad hoc}. The shifts in the content being taught are rarely accounted for, and in regards to the ways in which those shifts occur is that the second way of answering the question about the consequences of eliminating uncertainty comes in. When knowledge is taught as if it were certain and unquestionable, a key element of potential for democratic education embedded in uncertainty is disrupted. Many political theorists and philosophers have been discussing democracy not as a system of government, but as the always-open quality of social order, and the possibility of unplanned change and challenge being ever present (Mouffe, 1996; Rancière, 1999, 2007). Knowledge that tells our students that this is the way things are and have always been instantiates an ordering of the world that is not seen as social and epistemological anymore, but as ontological, and therefore, as unchangeable. The efforts to eliminate uncertainty from teaching and learning through the development of teaching methods that reorganize knowledge by removing uncertainty are therefore inherently conservative, no matter from which end of the ideological spectrum they come from.

It is important to note that many “postmodern” and constructivist educators advocate for teaching methods that retain uncertainty as part of the learning experience by urging teachers to let students construct their own learning experiences through problem-solving in learning communities, to use the language in vogue (see e.g. Doll, 1993; Slattery, 1995). Yet these tend to be efforts to contain uncertainty and bind it to the spaces that are designed by the skilled teacher. The problems that are being solved have pre-determined answers that allow students to find their own paths… as

\textsuperscript{12} For a philosophical critique of “learning” and the suggestion for a possible alternative in “study”, see Lewis (2013).
long as they are within those pre-determined boundaries. Uncertainty is limited to (parts of) the “how”, but since knowledge has been pre-produced by the different disciplines, the “what” is always a given. This leads us to question the very limits of the potential for democracy in schools per se (see Friedrich, Jaastad & Popkewitz, 2010). Franco & Levin (2007) provide a clear illustration of this problem, when discussing the teaching of history:

Although it is true that working with multiple perspectives of different actors... is a necessary entry point to denaturalize stagnant versions [of history], it is also true that one cannot (and should not) leave the decision of which are the “right” narratives about the past to students. (p.5)13

The point of working with “multiple perspectives” seems to be to grant students the illusion of openness and possibility, while at the same time taming the potential for challenging views (even “wrong” ones) to be valued outcomes of the process. Trust in students -and the potential for them to use and abuse uncertainty- is limited by the fears towards unpredictable outcomes.

The third way of addressing the importance of uncertainty is related to the uses of psychology to understand and define the learning subject. As I indicated above, the call to imbue student teachers with knowledge about the learner’s mind and development, and the implications of that knowledge in the development of teaching methods is part of the common sense of university-based teacher education. It is also one aspect that frequently appears in critiques of programs such as TFA or Teacher U: with so little time for teacher education, all that body of knowledge gets condensed into easy-to-follow recipes of “what works” (see e.g., Labarce, 2010; Laczko-Kerr & Berliner, 2002). However, as I am arguing in this article, it is the ways in which most university-based teacher education discourses have mobilized the knowledge produced by the learning sciences that made possible the reduction performed by boot-camp-style ARTC. As long as what we know about learning, and the mind is seen as a set of ahistorical facts used to provide principles to order curricular content in such ways that uncertainty is taken out of the equation, the knowledge behind the recipe becomes irrelevant. Teachers are supposed to assume it as true and merely carry out the necessary steps for successful teaching. Developmental psychology, for example, becomes like one of the sciences behind meteorology (physics, geology) that contributes to the production of weather forecasts. For the people counting on those forecasts for their crops, knowledge of the sciences behind meteorology may seem irrelevant, as they would only matter to meteorologists. In the same vein, knowledge about the mind, when taken as a universal given, may become unnecessary for teachers as they are not the ones developing the teaching methods. Even when those methods are based on classroom experiences, the learning sciences are still the ones providing legitimacy to this knowledge. A mere claim for more instruction on a-historicized facts of the mind for student teachers that supports the ways in which said facts inform methods does little to advance the struggle against the proliferation of programs that reduce teacher education to mere training, while in fact this claim supports it.

Finally, the idea that students’ actions and reactions can and must be predicted and anticipated as a way of carefully planning lessons implies another dimension-one that I argue-is in the loss of democratic potential, beyond that embedded in the uncertainty of knowledge. When we assume that we can fully understand our students by understanding how they learn, we are missing the importance of respecting and accounting for their humanity, that is, a uniqueness that cannot be encompassed by frameworks, understandings, or even language. Our seemingly necessary need to

13 "Porque si bien es cierto que trabajar con las múltiples perspectivas de actores diversos... es una entrada necesaria para desnaturalizar versiones anquilosadas, también es cierto que no se puede (ni se debe) dejar la libre decisión de cuáles son los relatos ‘correctos’ del pasado a los alumnos."
plan students’ behaviors impedes an authentic interaction with difference, or what Peters and Biesta, drawing from Derrida, call a deconstructive affirmation of the other:

The deconstructive affirmation of the other is not straightforwardly positive. It is not merely an affirmation of what already exists and, for that reason, can be known and identified. Deconstruction is an affirmation of what is wholly other. It is an affirmation of what is unforeseeable from the present, of what is beyond the horizon of the same. It is an affirmation of an other that is always to come, as an event that “as event, exceeds calculation, rules, programs, anticipation and so forth” (Derrida, 1992, p.27, quoted in Peters & Biesta, 2008, p. 15).

This “to-come” is another name for democracy, for justice (Derrida, 2004), as it presents us with an undecidable horizon of subjects whose actions can never be fully anticipated.

The argument presented is not against learning about the mind or interacting with the psy-field, as this field provides important perspectives to the educational debates. On the contrary, my argument is two-fold. On the one hand, student teachers should learn more about the state of affairs of the different psychologies, but this knowledge needs to be contextualized and historicized. It needs to consider all findings as contingent, not in terms of knowledge accumulation (“this is the best we have, as the discipline has linearly grown so far, and we will get closer to the truth as time goes by”) but in paradigmatic terms (“under this set of contingent assumptions, that have changed over time and will most likely continue to change, this is what we believe to be true”). In this sense, my argument supports Lagemann’s (2000) claim that the historical separation of psychology from philosophy in the early 20th century was one of the main factors contributing to the relegation of educational research to a lower status.

On the other hand, partly because of this contingent nature of knowledge, but also because of the effects of the psy-field over disciplinary knowledge, the use of this particular lens to translate disciplinary knowledge into subject matter should be problematized. Mobilizing psychology as the privileged lens in the alchemical transformation of disciplinary knowledge into curricular content has become naturalized as part of the educational landscape. If we are to embrace the democratic potential of uncertainty embedded in true inquiry (Cochran-Smith & Lytle, 2001) and in difference (Derrida, 1990, 2004), we need to explore the possibility of breaking the seemingly unquestionable link between psychology and teaching methods. I will explore what the result of this break might look like for teacher education in the final section of the paper, but for now, suffice it to say that the link between psychologies and teaching methods is neither natural nor necessary. In the words of William James:

You make a great, a very great mistake, if you think that psychology being the science of the mind’s laws, is something from which you can deduce definite programmes and schemes and methods of instruction for immediate schoolroom use,’ [William] James told the teachers. ‘Psychology is a science, and teaching is an art and sciences never generate arts directly out of themselves. An intermediary, inventive mind must make the application, by using its originality. (Lagemann, 2000, p. 38)

**Pointing Towards a Different Kind of Teacher Education**

In this last section, I suggest to a few loose guidelines that will hopefully point towards a different way of thinking about teacher education. It is important to note that there is no guarantee of success in the engagement with these guidelines. In fact, challenging the very idea of a silver bullet solution to teacher education is at the core of this project. The point is not to replace one regime of
truth with another, in foucaultian terms, but to propose an experiment, or more specifically, engage in what Masschelein and Simons (2009) term an “experimental ethos”:

An experiment, therefore, would not only be about applying experimental methods, but also about an experimental ethos, putting oneself to the test, to risk oneself. It would involve an attentive and experimental attitude in the full meaning of the word: exposition to the present and thus accepting to be touched, infected or even intoxicated, accepting to think and become otherwise – without immunising oneself in advance. (p. 242)

Situating this essay within this ethos, any policy recommendation that can stem from it has to be grounded on these key principles: to allow teacher educators and institutions the room to experiment, to not be bounded by the established knowledge and what is taken as fact or common sense, to trust in the capacity of thought to escape its own boundaries. This is not the “reform” that contemporary “reformers” are promising (see e.g. Rhee, 2013), as it is precisely the impossibility of making any promises what needs to be accepted. Instead, this is about the reclaiming of the trust that, in part due to our own undoing, has been lost. As part of this principle, we need to dislodge the discourses on “what works.”

The exploration for a different kind of teacher education (one that could not be boiled down to a few weeks of “training”) needs to contest the idea that there are methods, strategies, or approaches to teaching that work anytime, anywhere. It is not that we have not found them yet, but the rationale behind the search itself is what needs to be challenged. Seeking and imparting teaching methods that “work” has embedded the assumption of a body of knowledge that is fact, and therefore will always be so. Under this assumption, what we know about the mind is the end result of an accumulation of progressive discoveries methodically achieved in an unbiased environment. This is the foundation behind the argument that states that basing methods on this body of knowledge cannot but guarantee success. This way of thinking does a disservice to teachers and teacher educators. Instead, I propose a first experimental policy recommendation:

Policy Recommendation #1: Instead of using the psy-field as a source for stable knowledge on which to build teaching methods, teacher education programs should shift the focus to understanding the psy-field as a historical and contingent set of discursive practices.\(^\text{14}\)

While many courses within teacher education programs explore the history of psychology and the different models the field developed, my proposed recommendation points towards a deeper change. History surveys tend to be founded on progressive narratives that pose the present as a result of an accumulation of knowledge. Instead, we can explore the different psychologies as ways in which the mind and learning have been historically constructed, under different assumptions, as well as the consequences of these assumptions and frameworks. This history of the epistemologies of childhood and the mind would bring about the contingent nature of today’s facts, as well as the need to consider the fluidity of these temporary foundations when thinking about teaching and learning theories. For example, the notion that the mind develops in stages (as exemplified by the uses of Piaget’s scholarship) has become a pillar of contemporary discussions on teaching methodologies, to the point that what can and cannot be taught to particular groups of children is determined by this development. Instead of instructing student teachers on the different developmental stages as scientifically proven facts of the world, why not investigate the historicity of

\(^{14}\) “Discursive practices are characterized by the delimitation of a field of objects, the definition of a legitimate perspective for the agent of knowledge, and the fixing of norms for the elaboration of concepts and theories. Thus, each discursive practice implies a play of prescriptions that designate its exclusions and choices” (Foucault, 1977, p. 199)
the assumptions embedded in developmental psychology, such as the need for a linear time, the use of categorization as a way of grouping/separating distinctive phenomena, and the objectification of the mind? The shift towards a more historical and epistemological approach would not invalidate the findings of the psy-field. On the contrary, it would explore their complexity and, as I have argued above, by incorporating the uncertainty of contingency and the possibility of unplanned change, it could potentially allow democracy to enter the classroom (Ruitenberg, n.d.).

The discourse on “what works” has also succeeded in its dominance on current teacher education discussions thanks to the reliance on the psy-field in providing the principles to order subject matter content. While related to my previous point, it is a different argument leading to my second recommendation. Whatever works is seen as working because it can be replicated with a minimal level of uncertainty. This reduction is made possible by the translation of disciplinary knowledge into curricular content by privileging the lens of a psy-field that offers universal principles without regards to the discipline. Yet the logic behind each discipline is unique and, as is the case with the psychologies, constantly in flux. Hence, I propose a second experimental recommendation:

Policy Recommendation #2: Instead of relying on the psy-field to provide principles to order subject matter knowledge, teacher education programs should try introducing future teachers to the main current discussions within each field, coming directly from those fields.

As counterintuitive as it may sound, the fact that children are neither mathematicians nor historians does not necessarily imply the need for the psy-field to mediate between the disciplines, teachers, and students. Methods courses usually offered in university-based teacher education programs tend to take the knowledge produced by the different disciplines as objects to be translated into the language of psychology in order to make them teachable. The shift in the way of thinking about teacher education that I am proposing leads to the question of what would happen if the psy-field would be de-centered from that position. Instead of having a math methods course that takes mathematical knowledge and re-orders it following the principles of the development of the mind or the role of “social context” in that development, we could begin with courses that would introduce student teachers to the field of mathematics focused on the current and historical epistemological debates of the field. These courses would not provide student teachers with recipes about what works in the teaching of math, but would instead lead them to understand the reasoning that (historically, contingently) sustains the field and challenge them to find ways to bring those ways of thinking to their students.

One of the difficulties here is that this is anything but “evidence-based” teaching, as the alleged certainty of proven methods is taken out of the equation. This experimental guideline does not aim at replacing one privileged and universalized translation lens with another, as each discipline would have its own ordering and contingent principles. What is behind this reasoning is not some sort of belief in magical qualities that “natural” teachers might have. On the contrary, what I am proposing is founded on nothing but trust in the intelligence of everybody, in the capacity of any teacher to bring the specific reasoning of each discipline to their students, and the potential of keeping uncertainty (in the results of inquiry, in the effects of teaching, in the agency of students) as a democratic core of education.

Concluding Thoughts

The proliferation of alternative teacher certification programs that reduce coursework to a minimum is certainly a worrying trend. These programs tend to seriously undermine the possibility
of producing teachers that are critical thinkers that can work through the issues of current classrooms and eventually change the unequal conditions that lead to an unequal society (see e.g. Laczko-Kerr & Berliner, 2002; Popkewitz, 1998). They also dismiss all efforts to take teaching seriously (some people call this “professionalizing teaching”, but I share Fendler’s (2009) concern about this concept being a double-edged sword), boiling it down to basic classroom management techniques added to content knowledge. The idea behind these programs seems to be that anyone who has the right dispositions and possesses subject knowledge can become a good teacher after some practice and an introduction to the “basics.” The future of university-based teacher education programs, which are lengthier and more expensive, seems threatened.

Facing this prospect, scholars have been defending university-based teacher education programs from what they have considered to be an attack from the conservative right that aims at destroying unions, privatize education, and containing any efforts to change the status quo. While this is certainly an important aspect of the attack on teacher education, I have argued in this paper that defenders of traditional programs have been missing a key element: it was not only the reactionary right that opened the door for this type of ARTC, but the very way in which many teacher educators (“progressive” or “traditional”) have been thinking about teaching and teacher education that has played a role in providing the conditions for the emergence of these programs as a “reasonable” solution for the problems facing schools. In some aspects, boot-camp-style ARTC do not present a different reasoning for educating teachers than traditional university-based programs, but merely a reduction of the same ways of thinking. For instance, both alternative and traditional programs tend to privilege experience over “mere theory,” re-inscribing a partition that is neither natural nor necessary. Clearly, ARTC make classroom experience the be-all end-all of teacher education, while traditional programs are still for the most part trapped in what Cochran-Smith and Lytle (2001) call the knowledge-for-practice model, which understands practice as the space where abstract theories (still a part of teacher education) are confirmed or refuted and knowledge-of-practice(Cochran-Smith and Lytle, 2001), which values the practical know-how of master teachers above all else. Yet the distinction between theory and practice is still there. In the same vein, both kinds of teacher education programs usually conceive of teaching as the enactment in the classroom of what has been proven to work – but while university-based programs tend to see themselves producing the knowledge about what works with the help of the psy-field providing theories about learning and the development of the mind, boot-camp-style programs merely take the findings from those disciplines and turn them into step-by-step fool-proof strategies. However, both kinds of programs agree on the need to improve teaching and teacher education following “evidence-based research,” finding ways to produce knowledge that is broadly applicable, and that can be planned and used for planning.

The experimental recommendations I have proposed do not work under the same assumptions. They cannot be used as recipes, and are not founded on evidence-based research. These guidelines present what I call “normative minimalism,” that is, a set of general orientations based on one principle: if teacher education is to produce teachers that see themselves as intellectuals that can break out of their own common sense and challenge the ways in which schools function and open the door for democracy to enter (Ruitenberg, n.d.), then the very foundations of teacher education need to be shaken. This cannot be a discussion of needing more of this and less of

15 Cochran-Smith and Lytle (2001) advocate for an alternative model, knowledge-in-practice, based on an inquiry stance, according to which novice teachers work together with experienced ones in the communal work of producing local knowledge in schools. While their proposal has many aspects in common with my argument, the authors still seem to privilege work in the classroom as providing a more valuable kind of knowledge that works against their intention of flattening the hierarchies of knowledge and experience.
that, in which the terms are never analyzed. What we need is a shift in the very paradigms under which we have been producing the conditions for the present to take place as the only possible present, in order to open up our imaginations for new possibilities and new subjectivities.

References


RoutledgeFalmer.


About the Author

Daniel Friedrich
Teachers college, Columbia University
Friedrich@tc.edu
Daniel Friedrich is Assistant Professor in the Dept. of Curriculum and Teaching at Teachers College, Columbia University. Prof. Friedrich is currently interested in the system of thought behind the travelling of teacher education reforms around the world, with a focus on the Teach For All network. He has published articles in Comparative Education Review, Discourse: Studies in the Cultural Politics of Education and the Journal of Curriculum Theorizing among others. His book Democratic Education as a Curricular Problem will be available in late 2013.
education policy analysis archives
editorial board

Editor Gustavo E. Fischman (Arizona State University)
Associate Editors: Audrey Amrein-Beardsley (Arizona State University) Rick Mintrop, (University of California, Berkeley) Jeanne M. Powers (Arizona State University)

Jessica Allen University of Colorado, Boulder
Gary Anderson New York University
Michael W. Apple University of Wisconsin, Madison
Angela Arzubiaga Arizona State University
David C. Berliner Arizona State University
Robert Bickel Marshall University
Henry Braun Boston College
Eric Camburn University of Wisconsin, Madison
Wendy C. Chi* University of Colorado, Boulder
Casey Cobb University of Connecticut
Arnold Danzig Arizona State University
Antonia Darder University of Illinois, Urbana-Champaign
Linda Darling-Hammond Stanford University
Chad d'Entremont Strategies for Children
John Diamond Harvard University
Tara Donahue Learning Point Associates
Sherman Dorn University of South Florida
Christopher Joseph Frey Bowling Green State University
Melissa Lynn Freeman* Adams State College
Amy Garret Dikkers University of Minnesota
Gene V Glass Arizona State University
Ronald Glass University of California, Santa Cruz
Harvey Goldstein Bristol University
Jacob P. K. Gross Indiana University
Eric M. Haas WestEd
Kimberly Joy Howard* University of Southern California
Aimee Howley Ohio University
Craig Howley Ohio University
Steve Klees University of Maryland
Jackyung Lee SUNY Buffalo

Christopher Lubienski University of Illinois, Urbana-Champaign
Sarah Lubienski University of Illinois, Urbana-Champaign
Samuel R. Lucas University of California, Berkeley
Maria Martinez-Coslo University of Texas, Arlington
William Mathis University of Colorado, Boulder
Tristan McCowan Institute of Education, London
Heinrich Mintrop University of California, Berkeley
Michele S. Moses University of Colorado, Boulder
Julianne Moss University of Melbourne
Sharon Nichols University of Texas, San Antonio
Noga O'Connor University of Iowa
João Paraskveva University of Massachusetts, Dartmouth
Laurence Parker University of Illinois, Urbana-Champaign
Susan L. Robertson Bristol University
John Rogers University of California, Los Angeles
A. G. Rud Purdue University
Felicia C. Sanders The Pennsylvania State University
Janelle Scott University of California, Berkeley
Kimberly Scott Arizona State University
Dorothy Shipp Baruch College/CUNY
Maria Teresa Tatto Michigan State University
Larisa Warhol University of Connecticut
Cally Waite Social Science Research Council
John Weathers University of Colorado, Colorado Springs
Kevin Welner University of Colorado, Boulder
Ed Wiley University of Colorado, Boulder
Terrence G. Wiley Arizona State University
John Willinsky Stanford University
Kyo Yamashiro University of California, Los Angeles

* Members of the New Scholars Board
archivos analíticos de políticas educativas
consejo editorial

Editor: Gustavo E. Fischman (Arizona State University)
Editores. Asociados Alejandro Canales (UNAM) y Jesús Romero Morante (Universidad de Cantabria)

<table>
<thead>
<tr>
<th>Nombre</th>
<th>Institución</th>
</tr>
</thead>
<tbody>
<tr>
<td>Armando Alcántara Santuario</td>
<td>Instituto de Investigaciones sobre la Universidad y la Educación, UNAM México</td>
</tr>
<tr>
<td>Claudio Almonacid</td>
<td>Universidad Metropolitana de Ciencias de la Educación, Chile</td>
</tr>
<tr>
<td>Pilar Arnaiz Sánchez</td>
<td>Universidad de Murcia, España</td>
</tr>
<tr>
<td>Xavier Besalú Costa</td>
<td>Universitat de Girona, España</td>
</tr>
<tr>
<td>Jose Joaquin Brunner</td>
<td>Universidad Diego Portales, Chile</td>
</tr>
<tr>
<td>Damián Canales Sánchez</td>
<td>Instituto Nacional para la Evaluación de la Educación, México</td>
</tr>
<tr>
<td>María Caridad García</td>
<td>Universidad Católica del Norte, Chile</td>
</tr>
<tr>
<td>Raimundo Cuesta Fernández</td>
<td>IES Fray Luis de León, España</td>
</tr>
<tr>
<td>Marco Antonio Delgado Fuentes</td>
<td>Universidad Iberoamericana, México</td>
</tr>
<tr>
<td>Inés Dussel</td>
<td>FLACSO, Argentina</td>
</tr>
<tr>
<td>Rafael Feito Alonso</td>
<td>Universidad Complutense de Madrid, España</td>
</tr>
<tr>
<td>Pedro Flores Crespo</td>
<td>Universidad Iberoamericana, México</td>
</tr>
<tr>
<td>Verónica García Martínez</td>
<td>Universidad Juárez Autónoma de Tabasco, México</td>
</tr>
<tr>
<td>Francisco F. García Pérez</td>
<td>Universidad de Sevilla, España</td>
</tr>
<tr>
<td>Edna Luna Serrano</td>
<td>Universidad Autónoma de Baja California, México</td>
</tr>
<tr>
<td>Alma Maldonado</td>
<td>Departamento de Investigaciones Educativas, Centro de Investigación y de Estudios Avanzados, México</td>
</tr>
<tr>
<td>Alejandro Márquez Jiménez</td>
<td>Instituto de Investigaciones sobre la Universidad y la Educación, UNAM México</td>
</tr>
<tr>
<td>José Felipe Martínez Fernández</td>
<td>University of California Los Angeles, USA</td>
</tr>
<tr>
<td>Fanni Muñoz</td>
<td>Pontificia Universidad Católica de Perú</td>
</tr>
<tr>
<td>Imanol Ordorika</td>
<td>Instituto de Investigaciones Economicas – UNAM, México</td>
</tr>
<tr>
<td>María Cristina Parra Sandoval</td>
<td>Universidad de Zulia, Venezuela</td>
</tr>
<tr>
<td>Miguel A. Pereyra</td>
<td>Universidad de Granada, España</td>
</tr>
<tr>
<td>Monica Pini</td>
<td>Universidad Nacional de San Martín, Argentina</td>
</tr>
<tr>
<td>Paula Razquin</td>
<td>UNESCO, Francia</td>
</tr>
<tr>
<td>Ignacio Rivas Flores</td>
<td>Universidad de Málaga, España</td>
</tr>
<tr>
<td>Daniel Schugurensky</td>
<td>Arizona State University</td>
</tr>
<tr>
<td>Orlando Pulido Chaves</td>
<td>Universidad Pedagógica Nacional, Colombia</td>
</tr>
<tr>
<td>José Gregorio Rodríguez</td>
<td>Universidad Nacional de Colombia</td>
</tr>
<tr>
<td>Miriam Rodríguez Vargas</td>
<td>Universidad Autónoma de Tamaulipas, México</td>
</tr>
<tr>
<td>Mario Rueda Beltrán</td>
<td>Instituto de Investigaciones sobre la Universidad y la Educación, UNAM México</td>
</tr>
<tr>
<td>José Luis San Fabián Maroto</td>
<td>Universidad de Oviedo, España</td>
</tr>
<tr>
<td>Yengny Marisol Silva Laya</td>
<td>Universidad Iberoamericana, México</td>
</tr>
<tr>
<td>Aida Terrón Bañuelos</td>
<td>Universidad de Oviedo, España</td>
</tr>
<tr>
<td>Jurjo Torres Santomé</td>
<td>Universidad de la Coruña, España</td>
</tr>
<tr>
<td>Antoni Verger Planells</td>
<td>University of Amsterdom, Holanda</td>
</tr>
<tr>
<td>Mario Yapu</td>
<td>Universidad Para la Investigación Estratégica, Bolivia</td>
</tr>
</tbody>
</table>
We Brought It Upon Ourselves

arquivos analíticos de políticas educativas
conselho editorial

Editor: **Gustavo E. Fischman** (Arizona State University)
Editores Associados: **Rosa Maria Bueno Fisher e Luis A. Gandin**
(Universidade Federal do Rio Grande do Sul)

- **Dalila Andrade de Oliveira** Universidade Federal de Minas Gerais, Brasil
- **Paulo Carrano** Universidade Federal Fluminense, Brasil
- **Alicia Maria Catalano de Bonamino** Pontificia Universidade Católica-Rio, Brasil
- **Fabiana de Amorim Marcello** Universidade Luterana do Brasil, Canoas, Brasil
- **Alexandre Fernandez Vaz** Universidade Federal de Santa Catarina, Brasil
- **Gaudêncio Frigotto** Universidade do Estado do Rio de Janeiro, Brasil
- **Alfredo M Gomes** Universidade Federal de Pernambuco, Brasil
- **Petronilha Beatriz Gonçalves e Silva** Universidade Federal de São Carlos, Brasil
- **Nadja Herman** Pontificia Universidade Católica –Rio Grande do Sul, Brasil
- **José Machado Pais** Instituto de Ciências Sociais da Universidade de Lisboa, Portugal
- **Wenceslao Machado de Oliveira Jr.** Universidade Estadual de Campinas, Brasil
- **Jefferson Mainardes** Universidade Estadual de Ponta Grossa, Brasil
- **Luciano Mendes de Faria Filho** Universidade Federal de Minas Gerais, Brasil
- **Lia Raquel Moreira Oliveira** Universidade do Minho, Portugal
- **Belmira Oliveira Bueno** Universidade de São Paulo, Brasil
- **António Teodoro** Universidade Lusófona, Portugal
- **Pia L. Wong** California State University Sacramento, U.S.A
- **Sandra Regina Sales** Universidade Federal Rural do Rio de Janeiro, Brasil
- **Elba Siqueira Sá Barreto** Fundação Carlos Chagas, Brasil
- **Manuela Terrasêca** Universidade do Porto, Portugal
- **Robert Verhine** Universidade Federal da Bahia, Brasil
- **Antônio A. S. Zuin** Universidade Federal de São Carlos, Brasil