Whatever it takes: How beginning teachers learn to survive

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ABSTRACT

Reports of high attrition rates among beginning teachers suggest that new practitioners need help to develop coping strategies, preferably while they are still teacher candidates under the supervision of experienced teachers. Defining teaching as an ill-defined problem, where beginners have a limited repertoire of problem-solving strategies, this paper suggests that the ability to satisfice – that is, develop temporary but sufficient solutions – enables teachers to survive the early years of practice. However, it appears that, paradoxically, satisficing is one of the skills that is developed with experience. As we demonstrate in this paper, veteran practitioners have learned how to cope and by mentoring, they can help newcomers deal with the complex problems of initial practice.

1. Introduction

Although the university’s responsibility to the workplace has long been debated, with some insisting that education is not career training, there is less controversy about the mandate of professional schools. On both sides of the school-to-work transition, there is agreement that a degree from a professional school should prepare an individual for work in the cognate profession. And although there is considerable disagreement about the best means of that preparation, the widespread existence of practica, internships, and other work-study programs indicates consensus on the need to provide newcomers with some form of gradual and scaffolded induction experience. In this article, we draw on some of our research data to reflect on the nature of that transition process and to suggest a way in which it might be improved.

1. Method

We have been investigating university students in their final year before graduation, neophyte practitioners, and experienced practitioners in four professions – physiotherapy, occupational therapy, social work, and teaching – all of whom studied and graduated from a university in Quebec, Canada and were employed in the same area as they had studied. We have interviewed the neophytes and their supervisors during the final year field experience (internship), and during the first year of professional practice. Each semi-structured interview was conducted by two researchers, usually one with experience in the neophyte’s professional field and one from another of the four professions under investigation. The interviews from 32 dyads were transcribed and a series of content analyses has allowed us to make comparisons among the four professions as we investigated various aspects of the trajectory from university to professional practice (e.g., Le Maistre & Paré, 2004; Paré & Le Maistre, 2006). While there were many similarities among the experiences of members of the four professions (such as extensive, supervised field experience), there were some clear differences. It was obvious from our results, for example, that all the students received excellent support during their practicum. However, the beginning professionals in physiotherapy, occupational therapy, and social work in our study were given considerable support from experienced colleagues, whether by explicit teaching and modeling or by the requirement for supervisors to cosign reports, while the beginning teachers we interviewed received little or no support after they had graduated and been hired.
In this paper we focus on student teachers, their supervising teachers, and beginning teachers, outline some of the problems the beginners face, consider how they cope with their early experiences, and suggest a way they can be helped to do so more effectively. Although our focus has been local, and the phenomena we observed and report are thus particular to the jurisdictions we studied, we believe that many of the situations and dynamics described in this article will be familiar to new teachers and to those who help those teachers make the passage from school to work.

3. The difficulties of beginning teachers

As well as completing university courses, student teachers (teacher candidates) must reach an acceptable level of performance in their practicums to pass their internship and be certified to teach. They are being evaluated by their supervising teacher (associate teacher) who is an experienced practitioner, they want to do the best possible job, and they are insecure. Similarly, neophyte teachers serving a period of probation are assessed by administrators, so they too are vulnerable and insecure.

A plethora of studies over the past 20 years has painted a bleak scenario of the life of the beginning teacher. The increasing complexity of teachers’ workloads has been explained by a number of factors: greater societal expectations and lower societal recognition; greater accountability to parents and policy-makers; pedagogical and curriculum changes being implemented at an increasing rate; increased need for technological competence; increased demands beyond the pedagogical task; increasing diversity among students; and more administrative work (see, for example, Dussault, Deaudelin, Royer, & Loiselle, 1999; Goodlad, 1984; Hargreaves, 1992, 1994; Lortie, 1975; McLagan, 1999; Nias, 1989). While these pressures are true for all teachers, the situation for beginners is even worse. No other profession takes newly certified graduates, places them in the same situation as seasoned veterans, and gives them no organized support. The newly graduated therapists and social workers we studied began their careers with a light workload – that is, both a small number of clients and relatively straightforward cases – and were assigned a supervisory colleague who worked closely with them in their initial period of practice. Beginning teachers described to us their timetables, work assignments and classroom supplies – and even students – as being those that seasoned teachers already in the school did not want. While some jurisdictions give their beginning teachers the same considerations as our other professionals described, we suspect that the situations described by the beginning teachers in our study are not uncommon. In the words of one first year teacher:

When you’re a new teacher, it’s a very isolating feeling because you’re there in the classroom and you don’t know who to turn to if you need help. … So you don’t necessarily feel like you can go to them if you’re having a problem because in some way, you are going to lose credibility with them. It makes it difficult if you need help. Robin.

4. Attrition

There are many studies that relate these pressures to high attrition rates among beginning teachers, reported as high as 50% within the first five years in some jurisdictions in the United States (American Association of State Colleges and Universities, 2006; Ingersoll, 2001; Ingersoll & Smith, 2004; Morey & Murphy, 1990; The National Foundation for the Improvement of Education, 2002). Harris (2004) reported that in the United States, more teachers leave the profession than join it and two studies make the startling claim that there are some districts where the teacher dropout rate is actually higher than the student rate (Fulton, Burns, & Goldenberg, 2005; U.S. Department of Education, 2007). A recent study in Illinois (DeAngelis & Presley, 2007) concludes that the problem in that state is over-estimated, but supports earlier claims that the leavers “are among the brightest and best” (see for example, Schlecty & Vance, 1981, or more recently, Henke, Chen, & Geis, 2000). If these beginners are identified as especially able, why do they leave teaching? According to the president of the National Commission on Teaching and America’s Future: “They leave for many reasons, but lack of support is at the top of the list” (Carroll, 2005, p. 199). Later in this paper, we shall propose another reason that emerged from our research.

5. Mentoring

With this bleak picture of the pressures on beginning teachers, the question becomes not why do as many as 50% of teachers leave teaching within five years, but rather, why do more than 50% stay? Mentoring and induction programs of various types and various degrees of success around the world have claimed to solve the attrition problem and to provide the support that Carroll identified as necessary for beginners. There is much anecdotal evidence of the effects of induction and mentoring programs in retaining teachers, but few empirical studies. Cullinford writes: “There are many books on how to introduce and practice mentoring, but far fewer which provide a scrutiny of what actually takes place” (Cullinford, 2006, p xiii). Ingersoll and Kralik’s (2004) analysis of research studies on ten existing induction programs draws a very tentative conclusion that “collectively the studies do provide empirical support for the claim that assistance for new teachers and, in particular, mentoring programs have a positive impact on teachers and their retention” (p.1), but they warn that the studies were limited and failed to control for many factors. Our observations of the literature over the past eight years suggest that mentoring and induction programs are not as common, as well-delivered, nor as long-lasting as the great quantity of literature on them might suggest, so that most beginning teachers are still unsupported by an organized induction program.

The motivations for experienced teachers to take on the responsibility of helping a new colleague, whether a student teacher or a newly graduated teacher, are largely intangible. Mentors reported to us that a newcomer’s questions force them to reflect on their own practice, and that a mentoring dyad is often beneficial to both members. The presence of a mentoring program in a school helps the school to be a learning community. There is a multiplier effect, as students continue to be affected by better teachers. Being asked to mentor newcomers is recognition of the expertise of the mentors in any profession and gives them an opportunity to demonstrate leadership: mentoring is identified as an expectation in the professional code of ethics of the therapists and social workers we studied. But mentoring is time-consuming, mentoring activities often take place at lunchtime or outside working hours, and in teaching, senior colleagues are too absorbed with their own classes, especially at the beginning of the school year, to be available to help struggling beginners.

6. Realities of the first year

Another reason often cited for the attrition rate among beginning teachers is the clash between expectations and reality. One first year teacher told us:

The staffroom is a good place to go to hear: “It’s not just you: we’ve all been through that.” Becky

Moir (1999) describes the first year teacher as passing through five stages. First is the anticipation stage, before starting the year,
characterized by romance and anxiety. Then, after term has started and the early enthusiasm has been dashed by what Veenman (1984) famously described as “reality shock,” and Huberman (1993a) as “culture shock,” comes the survival phase, when the beginners are struggling to keep going. Towards the end of the first term, the beginners reach the disillusionment phase – they are constantly tired, their morale is low, and they question their abilities. The breathing space provided by a holiday after the first term allows the teacher to return to teaching rejuvenated, and at the end of the year, Moir identifies a reflection phase, when the end of the year is in sight and plans can be made for the anticipation of a new school year.

Jones’s (2006) description of Sam, one of the five beginning teachers in her study of mentoring, illustrates aspects of this shock. First, Sam had been convinced by advertising and promotional materials that teaching was a high-status profession and that teachers were respected members of society. She felt disabused of this when she failed to get the support she was expecting from her students’ parents. Second, and more profoundly, she found that her standards for student behaviour and work were higher than the norm in her school. Her mentor helped her with the difficult task of establishing standards that, although lower than her ideal, would be acceptable to her, and would not cause constant conflict in her class. Sam says: “I don’t think, if I hadn’t lowered them, I would have survived” but continues: “They’re still in the back of my mind” (Jones, 2006, p. 68). It is intriguing to wonder whether, with the confidence of more experience, or if in another school, Sam would bring her standards forward to the front of her mind.

7. Problem solving

Another difficulty experienced by beginning teachers is learning to adapt to the number and scale of the decisions they are called upon to make instantaneously and simultaneously without the benefit of experience to guide them in finding solutions to the problems. This was graphically described by a student teacher in our study:

It just seems that there is so many adjustments that you're making all the time, on-the-fly in a classroom. It's like (snaps fingers), boom, ok, do this, do that and then you see this happening and there is always decisions being made, like all the time. Ethan

Newell and Simon (1972) defined problem solving as a search within a problem space: a situation containing an initial state and a goal state with a number of nodes called knowledge states between them. The problem solver identifies the existence of the problem by determining that there is a gap between the initial state and the goal state and builds a path through the problem space by applying operators that move him from one knowledge state to another. We can imagine a teacher faced with a class of recalcitrant students (the initial state) and the need to establish order so that he can deliver instruction (the goal state). Beginners, naïve in the context of the problem, will not have experienced enough similar situations to give them access to many knowledge states, so their problem space will have few nodes and their search through the problem space will be inefficient and taxing. The classroom management problem space is familiar to an experienced teacher, who will have a repertoire of knowledge states (eye contact, proximity to misbehavers, dealing with individuals rather than a group, calming demeanor, low voice level...) that will allow him to develop an efficient path through the space to the goal state. The experienced teacher can call up a previously used problem space from long-term memory, so reaching the goal state is far less demanding and may even look effortless to a novice observer.

Newell and Simon’s model assumes clearly defined starting and goal states, characteristic of well-defined problems. But teachers are constantly called upon to solve ill-defined problems and to use their training and experience to make decisions quickly and on the basis of incomplete information. Huberman (1993b) goes further, seeing the teacher first of all as bricoleur rather than a problem-solver, that is, a sort of tinkerer who creates and repairs learning activities on the run:

Teaching, like other highly complex, unstable and furiously interactive tasks, poses “wicked problems,” problems whose solutions are not inherent in the problem space itself and thus which need to be progressively transformed into simpler problems for which the solutions are likely to be appropriate. (Huberman, p. 16)

Beginning teachers’ most easily recalled problem spaces are the well-defined problems they have been assigned during their university courses. They often assume that classroom situations will be equally well-defined, with discrete solutions, and find it difficult to make the kind of spontaneous decisions needed when responding to unpredictable situations – situations that are not included in their “script.” During their practicum, they are protected by their supervising teacher who can step in if the situation warrants. One neophyte described this as being in “the student bubble.” This transition from support and dependence to sole responsibility and independence makes a large contribution to the reality shock they experience in their first year.

8. How do they survive?

If the load of problems to be solved by the beginning teacher is so great, if the exigencies of the classroom lower the morale of the beginning teacher, and if supportive mentoring and induction programs are inadequate – or non-existent – we return to the question: Why do beginners stay? To examine this, we asked: What skills do student teachers and neophyte teachers demonstrate that enable them to deal with the difficulties of the transition from university to work and to adapt to becoming teachers? What strategies do they use to solve the types of problems that occur during their classroom teaching? How do they move from a problem’s initial state to the goal state? And where do they learn these strategies?

Loughran, Brown, and Doecke (2001) discuss the limitations of teacher preparation programs realistically:

Issues and likely concerns are able to be highlighted but not fully addressed as teacher preparation cannot duplicate the reality of the actual world of beginning teaching. Therefore, strategies that student-teachers can use to help themselves become very important in influencing their ability to cope, and developing these strategies is an important aspect of teacher preparation. (Loughran et al., 2001, p. 17)

While we support the first sentence, which was backed up by our own research, we are troubled by the second sentence. In an earlier work (Dias, Freedman, Medway, & Paré et al, 1999) we found that school-based preparations for professional practice, such as simulations and case studies, were inadequate replications of workplace complexity. Certainly, student teachers need to develop coping strategies, but we have not observed any evidence of programs that regard this as “an important aspect.” We believe, therefore, that if student teachers and beginning teachers cope, or approach the performance of experienced teachers, they must learn the strategies used by experienced teachers as soon as possible in their careers or be taught them.
in their university programs. Since a broad knowledge base can only be developed through experience, is there another strategy that will help the beginner?

9. Satisficing

Simon (1957) developed the construct of satisficing as a strategy in decision-making situations where problem solvers cannot even identify the optimal outcome (i.e., the goal state of a problem space), but need a solution to survive. The solution must suffice – it must be sufficient to meet the requirements of the situation – but it must also satisfy the problem solver. Since the sufficient solution is not necessarily the optimal solution, the problem solver must be able to live with a less than perfect solution.

It involves accepting: a choice or judgment as one that is good enough, one that satisfies. According to Herb Simon, who coined the term, the tendency to satisfice shows up in many cognitive tasks such as playing games, solving problems, and making financial decisions, where people typically do not or cannot search for the optimal solutions. (Reber, 1995)

Satisficing reduces the cognitive load on the problem solver and removes the need for him to assess probabilities so it speeds up the attainment of a goal state. Instead of asking the difficult questions – Is this the best possible solution out of a number of possible solutions, and what is the probability that this solution will maximize the result? – the satisficer asks, consciously or unconsciously: Is this a solution that will work and can I live with the outcome? In Byron’s terms, “The contemporary satisficing rule says: identify a threshold of expected utility that would be satisfactory, and choose the first alternative whose expected utility exceeds the threshold.” (Byron, 2005, p. 312)

We examined our interview transcripts for evidence of satisficing among our student teachers and beginning teachers. Not surprisingly, we found that some of these neophytes, given their stage of development, were very demanding of themselves. Our research interviews showed examples of successful student teachers – those rated highly by their supervising teachers – who were not satisfied with their accomplishments, and were constantly seeking to “optimize,” that is, to choose the best possible solution to the problems they encountered in their classrooms. The observation that satisficing is more difficult for highly successful or idealistic people has also been made by Nelson (2003)

The more you maximize — the more you believe that somewhere, somehow, there should be an ideal combination — the less happy you become. Unfortunately, the problem is even worse for high-achievers. Extensive knowledge and imagination allow high-achievers to compare themselves to realities that do not even exist.

And this may explain why “the brightest and best” are the people who are discouraged enough to leave teaching – they cannot meet their own expectations. The more highly rated student teachers in our study were often unable to self-evaluate or to recognize when they had actually taught an excellent class. David described an excellent lesson given by his student teacher, a moment he described as seeing “a teacher born”:

It hit that upper level that you [don’t] hit every lesson even. That you hit a few times a week, maybe. Maybe a few times a month... and there was a moment when they were together. And... I told everybody I knew, “I saw a teacher born today”. She didn’t realize. I said, “Did you realize that moment?” “What? I thought I was...” “No. That moment, you just—you have what it takes. You have what it takes.”

David suggested that the student teacher’s inexperience made it impossible for her to realize how good the moment had been:

I don’t think she believed me. I don’t think she quite felt it herself. Because if you don’t know what it is, you don’t feel it. David

The experienced teachers in our study were men and women who had been teaching between 10 and 30 years and who do “know what it is.” Based on their principals’ recommendation and their reputation with the university, they were all chosen as supervising teachers because of their teaching expertise, and many of the student teachers commended them for their continuing enthusiasm, passion for teaching, and concern for their students. One of the questions we asked them was: What are some of the important things that you want the student teachers to take away from this field experience? Six of the nine supervising teachers we interviewed made reference to the need for student teachers to accept their limitations, both during the 8-week practicum and after, or to recognize that student behaviour was not a personal attack on them. We offer a number of examples here, because we believe that the attitudes reflected in these teacher comments capture some of the critical elements of effective mentoring, and of the successful transition to professional practice:

The hardest thing as a teacher is to realize that you will never please every student in the class. You will never get all of them to pass, and not to take it personally. You know, that you have to realize you’re doing the best that [you] can. You know, I’m making the effort; this is what I’m doing; I’m trying to make it interesting, but inevitably, they won’t all... and when you hear, “Oh, this is boring,” don’t panic [but] say “Oh, well, OK. Fifteen think it’s interesting; this one doesn’t. Well, OK. This is the best that I can do”. . . . a lot of student-teachers get frustrated. You know, “This one’s not paying attention; this one finds it boring.” Or they give a test, and, “Oh my God, half of them failed.” I say, “Yeah, that’s the way it is. That’s the reality in many cases.”

Victoria

If you have a bad day it doesn’t mean you’re the worst teacher in the world. The best thing about teaching is, well one of them, is that the next day everything can be great again. ... Because a lot of times when you are a student teacher, its hard to get up there when plan A doesn’t work and switch to plan B. Its like “oh my God, my script, my lesson doesn’t say that!”

Because there is no such thing as a perfect lesson. I’d hope there is, but I’ve never found one. David

I tell them they are only one person. So they’re in a class of even thirty and they reach one child then they’ve really done their job. Of course you want them to reach more but I’m just saying that. So the other thing would be not to take things personally because they will be burnt out and so on and so forth if they don’t, which is very hard, to kind of take a backward kind of step and say, “You know, I’m doing my best...”

Eleanor

Don’t be discouraged if you’re going to class with, you know, all your preparations done, but you don’t get through it, or something happens and you, you know, it completely knocks you off schedule.... I would hope that they would realize that it’s not a personal thing. John

I said “You know you come in here and you’re not feeling well one day, well so what? The children understand that. You don’t need to be superwoman all the time.”

Theresa

This emphasis on wanting the student teachers to accept less than perfection from themselves suggested that the student teachers found it difficult to accept this and were unwilling to satisfice. The fact that the experienced teachers were identifying it as a skill also suggested that this is something else that develops with
confidence, experience, and expertise. The beginner believes that a problem must have an immediate, correct solution and does not
have the confidence to admit ignorance of an answer. The veteran is able and willing to defer answering a difficult question, or to accept a less-than-perfect solution to a classroom problem.

Yet some of the student teachers were beginning to move tentatively towards the realization that they were not perfect. We asked the student teachers to tell us some of the important things they had learned during the field experience.

...that you're learning and you're there to make mistakes...And that you're really in it for the long haul and you just need to realize that it's normal to make mistakes and learn from them.

Kerry

Um, well first of all, and foremost, I would say, I've learned that students' misbehaving is always going to happen. And it doesn't mean that I'm a bad teacher. I'm not trying to cop out, but I think that for the first little bit I was hypersensitive to students misbehaving and didn't realize that I needed that sort of time to get comfortable with them. And I would always, you know, freak out thinking, "oh God. They hate me. They're so evil, I'm never going to get them to do anything. This isn't going to work." And now, I think that with time, with that comfort level, I've grown to realize that students, there's going to be on days and off days. It's just how I deal with that and how I react to that matters.

Catherine

I can improve what I'm doing by changing things around a bit and that when lessons don't work out its not the end of the world. It just takes a little more work and some revision. Robin

The first year teachers often used the word "balance:" the need to establish a balance between personal and professional life:

I didn't have a life other than school...I have settled down, and I do find time to go out to movies every once and a while. Whereas, when I was in field experiences, there was no way.

Candace

between expectations and reality:

so that kept me on balance, knowing that it's not me, it's something in this school that isn't working. Becky

Between emotional engagement and acceptance of limits:

I was getting too attached – like I was feeling sorry for them and I wanted to help them more but I learned to sort of separate myself from that and after you figure that you can't help them all as much as you would like, then it gets easier, I find. Michelle

Michelle resolved this conflict by passing the problem to someone else:

When I saw that the social worker is here and that's her job, then I felt more relaxed. I always thought I had to take control. Like, ok, this is my class, and these are my problems and I have to deal with them in the classroom .... I learned that I am the teacher and I am going to teach and I'll have to leave those things for somebody else. Michelle although she ended this explanation by saying:

Even though you feel guilty sometimes and think, you know I should have been able to deal with that, suggesting that she still needs to develop some skills to distance herself from her “guilt” and accept her limitations.

We were impressed by the skilful way that the supervising teachers scaffolded the learning of the student teachers, and we believed that they were doing all they could to ease the difficult transition from expert student to beginning practitioner. Scaffolding provides a safer, less complicated problem space, where the newcomer probably has a greater opportunity to satisfice. But in the end, no matter how thoughtful and supportive the supervising teacher or mentor, the beginner has to come to terms with satisficing for herself if she is to make a painless entry into professional life.

One example shows this happening for a beginning teacher. In her first term of teaching, Debbie was very demanding of herself, and feeling very discouraged. She asked a senior colleague in an email:

But when do you reach the point—or do you ever—that you sort of, not give up, but resign yourself to the fact that some of them are going to work and improve, and others, by their own choosing, are not? SHOULD you reach that point? (Debbie, October, week 6 of first year of teaching)

Her mentor replied rather obliquely with a metaphor:

Only you know what you can live with....You also know that there's stuff out there to learn, and I know you're not ready to stop looking for it and learning it. When I'm sewing a quilt block, I know I'm not going to produce a perfect end product, because I'm not that good, and because I'm always pushing myself to learn new techniques. I know there will be flaws in the block, and that my eyes will be drawn to the flaws every time I look at the quilt. While I'm sewing, I have to figure out what I can live with, and what has to be ripped out. Mind you, all this time, I'm also trying to learn things that will improve the technique of the moment, because there is such a thing as a perfect quilt block, and I won't give up on learning how to make one. My allegory breaks down at the ripping out bit, because in teaching, you keep adding to what you know. The benefit is that each new class is new and the same, but YOU are different, having learned in one experience how to improve the next one. (Kim, mentor, October)

Whether or not the metaphor resonated for her, Debbie had time over the Christmas vacation to think about her situation and to answer her own question:

I've come to the conclusion ... that I'm never going to be the world's greatest teacher - and that's OK. But I'm confident I am a good teacher and might even have the makings of a VERY good teacher. And I'm satisfied with that. That came as quite the revelation - and when I decided I would accept that, the weight of the world (OK, the weight of a small horse, maybe) seemed to have lifted from my shoulders. Is this what they call making peace with your situation? Whatever it is, I'm content with it anyway. And I feel better than I have in months. (Debbie, first year teacher, January, emphasis added)

The emphasized words show Debbie's acceptance of her performance to that point and, importantly, the effect that it had of making her “feel better than I have in months.” Several years later, she is still demanding of herself and of her students, but more willing to accept it when her performance level falls below perfection. Clearly, with experience, she has developed and extended her strategies to deal with classroom management, lesson planning, and assessment. She has also collected resources, both tangible and intellectual, that she can draw from, but we believe that she would not still be a teacher – moreover a good teacher, respected by colleagues and students alike – if she had not learned early in her career how to satisfice.

10. Conclusion

Another way to look at satisficing comes from Engeström's notion of “creative externalization”: “As the disruptions and contradictions of an activity become more demanding, internalization increasingly takes the form of critical self-reflection – and externalization, a search for solutions, increases” (Engeström, 1999, pp.33-34). Satisficing actually keeps “disruptions and contradictions” from becoming too
much of a load during initial practice, but experience brings both critical self-reflection and the ability to seek more permanent solutions. The challenge remaining for those involved in teacher preparation programs, whether in universities or in school classrooms, is to how to help neophytes learn to do this.

It is paradoxical that satisficing, a highly effective strategy for the newcomer – whose inexperience means that many problems are ill-defined – is actually a skill that depends on experience. Certainly, as one gains experience, and more and more problems re-occur, the need to satisfice diminishes, since the stock of solutions increases. As a result, mentoring becomes a critical aspect of early practice, because veterans can explain the reality of “good enough,” as those we have cited do, and they can scaffold situations so that a solution on which the beginner has satisficed holds up until a better one can be developed. The supervising teachers we cite also take opportunities to address the strategy of satisficing explicitly and draw the student teachers’ attention to it when it occurs, but there is little evidence that this is addressed explicitly in university programs. Problem-based learning, common in business or engineering programs, might offer a strategy for providing student teachers with realistic, ill-defined, problems, rather than the contrived situations more common in pedagogy textbooks. Teacher educators should be less categorical about providing clear-cut “ideal” solutions to problems, even though the student teachers ask for them. Student teachers need to be convinced that in the long run, their ability to accept a less than perfect solution will be more useful to help them survive than the collection of foolproof recipes they often request from instructors.

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