

## Making Teacher Training courses more realistic: From Theory to Practice

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### Abstract

*“The most important knowledge teachers need to do good work is a knowledge of how students are experiencing learning and perceiving their teacher’s actions.” ~Steven Brookfield*

Over the last decades, the problem of theory versus practice in teacher education has increasingly gaining interest to stakeholders. A major concern in teacher education is applying theories and principles in ways to show their relevance to classroom practice. The theoretical knowledge that teachers gain in the training colleges is far from being related to the authentic classroom situation. Donald Schön’s (1983) ideas and conceptions are among those that have contributed to researchers and teacher educators becoming aware that professionals rarely simply ‘apply’ theory in their practice. It has been seen that theoretical knowledge do play a part but eventually it is the situation related components that helps the teacher in managing the class.

Teacher training colleges have come to realize that prescriptive transfer of theory is not enough (Brouwer, 1989). It has become clear that the content itself has failed to meet expectations and theory is insufficiently in step with reality. Furthermore, student teachers are confronted with different types of ‘theory’ in their practice schools which are not related to the changing student needs. The extent to which the activities of students match the goals of training will partly depend on the level and type of cooperation between training institutes and practice schools. As teachers face many problems transferring theoretical knowledge into practice, there is the need to connect theory to practice in pre service teacher training programmes. This study will at first review the B.Ed. curriculum, exploring the gaps in theory and practice and evaluate the needs of the teacher trainee. The study will further analyze the behavioral aspects needed by the trainee teachers in the actual classroom situation and what are the challenges faced by them, finally suggesting ways of linking theory to practice.

**Key Words:** Theory to practice; teacher education; prescriptive transfer of theory; Educational and psychological theories’ principles and concepts; methodology and pedagogy.

### Introduction

How should we handle a stubborn learner? What should I do when I am faced with a class of rowdy and noisy students? I was really nervous when I stood in front of the class XII students’. Did my students understand what I taught? Should I have started the chapter in this/that way? Every new teacher trainee is faced with a plethora of problems or questions

when she/he joins the teaching arena in the actual classroom situation and do not have readymade answers to these questions which are classroom specific and learner specific.

According to Elliot (1993) teachers learn how to teach from experience and reflection. Teachers also learn through practice, acquiring knowledge and reflecting on their experience (Stuart et.al, 2009; Korthagen et.al 2006; Taylor

et.al 1997). Learning to teach is a matter of learning the technical skills which enable individuals to function effectively in an education system. It requires knowledge and understanding of the subject. Learning about teaching is also enhanced through teacher trainees doing research on their own practice (Kagoda 2011). Ozgun-Koca et.al (2006) and Taylor (1997) emphasize the importance of the constructivist theory of learning in the training of teachers. They argue that it is learner centered environment in which past experience of the pre-service teacher is respected. The learners construct their own knowledge by anchoring new information to pre-existing knowledge. Stuart et.al (2009) further states that some of this knowledge comes from formal training courses, the schools and from a wider social and cultural context in which they live. This construction of knowledge is interactive, inductive and collaborative. The teacher educator acts as a facilitator, provides pre-service teachers with a variety of experiences from which learning is built. The process maximizes social interactions between the learners so that they can negotiate meaning to what is exposed to them. In constructivist teacher education programmes there is less emphasis on skills and more on personal knowledge and on thinking skills. Constructivist teaching methods include role plays, debates, reflective journal writing, discussions and peer observation.

The National Council for Teacher Education (NCTE) was established by an Act of Parliament (Act No. 73 of 1993) "with a view to achieving planned and coordinated development of the teacher education system throughout the country, as it has been invariably observed that, in the past, most teacher education programmes such as the B.Ed. and D.El.Ed engage less with subject knowledge. Various researchers have tried to find ways in which theory and practice could be integrated for effective and impactful outcome. Studies have shown that there is a need for and lack of integration of theory and practice in initial teacher training programmes and this has been

the focal point of discussion in teacher education. There is a continuous divide between theory and practice and its application. On the one hand both teacher educators and student teachers consider practical training to be an effective way to acquire (practical) knowledge, on the other hand it is claimed that the realization of teacher education goals – also in terms of integrating theory and practice – is occasionally impeded by the conformist and conservative influence that practical training can have on student teachers (Zeichner et al., 1987). That influence can be a disadvantage for strongly practice-oriented teacher training. There exists a dichotomy in the learning theories and the applicability of them in the classroom.

In the context of the discussion about relating practical and propositional knowledge, Thiessen (2000) distinguishes three orientations that have been emphasized in teacher education over the last 40 years: i) 'impactful behaviours,' leading to the training of prospective teachers in behaviours that appeared to be effective in process-product research; ii) 'reflective practices' and, iii) 'development of professional knowledge.'

Wideen, Mayer-Smith, and Moon (1998) have called the "traditional model of teacher education", where "the university provides the theory, skills and knowledge about teaching through coursework; the school provides the field setting where such knowledge is applied and practiced; and the beginning teacher provides the individual effort that integrates it all". In this traditional model, the problem of integrating theory and practice is understood as an *application problem* and the problem lies with the teacher candidates. On the other hand, if one subscribes to the notion that what teachers need is "practical wisdom" (*phronesis*) in an Aristotelian sense, as, for instance, Kessels and Korthagen (1996) and Phelan (2005) do, then the integration of theory and practice is not a problem of applying theory in practice, but rather a problem of helping teacher candidates develop practical wisdom (Korthagen, 2001).

This paper reports on a study that surveyed some teacher trainees and practicing teachers on their perspectives regarding how theory and practice can be integrated, how they integrate theory and practice, and what challenges they perceive for the integration in their own teaching and the teacher education programmes within which they work.

### **Objectives**

1. To identify the needs of the practice schools and the learner needs.
2. To explore the classroom management strategies needed by the trainee teachers.
3. To review the present B.ED curriculum and its relevance.
4. To identify challenges and problems faced by trainee teachers.
5. To find ways to link theory to practice to make it realistic.

### **Methodology**

- Review of research papers.
- In depth Interview of some trainee teachers and practicing teachers.
- Questionnaire

### **The study**

The study interviewed 50 trainee and practicing teachers of private B.ED colleges on their understandings and perceptions of theory and practice and the problems and challenges of integrating theory and practice. Using a questionnaire, it also studied on ways in which they and their own programmes do and do not integrate theory and practice.

### **Background**

Darling-Hammond (2006: 8) notes: "One of the perennial dilemmas of teacher education is how to integrate theoretically based knowledge that has traditionally been taught in university classrooms with the experience-based knowledge that has traditionally been located in the practice of teachers and the realities of classrooms and schools". In this context Chen et al (2010: 91) reveals that the quality of teacher

education programmes can be improved only if the teacher educators help student teachers to identify the gap between teaching and theory and continually facilitate them in connecting their learnt theory and practice. Higgs (2009) says, "Theory plays an important role in determining the nature of educational research and practice in teacher education and its effectiveness in its application". According to Hans N. Weiler of Stanford University, "One of the conventional assumptions about the difference between "theory" and "Practice" is that they represent, or require, different kinds of knowledge: "theory" traditionally represents a kind of knowledge that is the generalized distillation of observations for the purpose of explaining other observations; its principal purpose lies in the constant perfection of its own explanatory power. Theoretical knowledge is rated by how well it explains as wide a range of phenomena as possible. "Practice", by contrast, he states is conventionally predicated on a more instrumental conception of knowledge; it represents knowledge that helps to accomplish things, and that proves its worth by how well it does help to accomplish whatever needs to be accomplished, and therefore by how closely it corresponds to the particulars of a given problem situation. It therefore becomes necessary to acknowledge the importance of theory and its influence on educational research and practice in teacher education. It is clear from different researches that theory seeks to allow teachers to come out free from their dependency on practices that are the outcome of the traditional learning while at the same time allowing them to critically reflect on their practice in the classroom. It does this by means of critical modes of enquiry that are aimed at exposing and examining the beliefs, assumptions and values implicit in ideological and political agendas which often determine how teachers organize their experiences and practices in the classroom. For student teachers it is a reason to use theory in practice, and so for teacher education it is a reason to 'feed' student teachers' learning environment with

relevant theory. Shulman(1998) stressed that teacher education programs should link theoretical concepts with practical, 'real-world' teaching settings. Feimann-Nemser (2001) also lamented that "theschool experiences are often limited, disconnected from university coursework and inconsistent."

### **Classroom management techniques**

As teaching is often a complex and skilled practice, which is dependent on teachers' knowledge and skills, the art of learning how to teach and its process of becoming a teacher, shapes one's teacher identity. Classroom management is an umbrella term for teachers' actions to manage class, students' behavior and their learning. These actions encompasses works like establishing order, dealing with misbehavior, offering appropriate instruction, and taking care of students' emotional and cognitive needs (Emmer & Stough,2001). Nunan(1995) thinks that determining the way the students' think about their teachers' classroom management is of great importance, since there will be a negative impact on learning, if there's mismatch between what teachers and students expect to happen in the classroom. Shaver, S. F. (2006) considers the teachers who use a set of classroom management strategies like organizing, teaching management, teacher-student relationship, and teacher punishment-rewards (consequences) as "assertive teachers." These teachers clearly and firmly express their needs. They have positive expectations of students. They say what they mean and mean what they say. They are consistent and fair and maintained that classroom management puts more emphasis on providing supportive environment for students to learn materials rather than focusing on controlling behaviors.

*Effective management technique that the practicing teacher should adopt:*

- Getting to know each student and maintaining a diary.
- S/he should know the students weaknesses and strengths so that s/he

can give remedial coaching whenever required.

- S/he should maintain a formative discipline plan which should be positive, motivational, assertive, purposeful and constructive.
- S/he should be a facilitator giving scope to the students to think critically, to be creative and innovative.

### **The Broad Curriculum of NCTE and its relevance of Teacher Education**

The course structure offers a comprehensive coverage of themes and rigorous field engagement with the child, school and community. The programme is comprised of three broad inter-related curricular areas – I) Perspectives in Education, II) Curriculum and Pedagogic Studies, and III) Engagement with the Field. All the courses include in-built field-based units of study and projects along with theoretical inputs from an interdisciplinary perspective. Engagement with the Field is the curricular component that is meant to holistically link all the courses across the programme, while it also includes special courses for Enhancing Professional Capacities (EPC) of the student teachers. Transaction of the courses is to be done using a variety of approaches, such as, case studies, group presentations, projects, discussions on reflective journals, observations of children, and interactions with the community in multiple socio cultural environments.

*The National Curriculum Framework for Teacher Education (2009) made the following suggestions:*

- Make reflective practice the central aim of teacher education in areas of content and pedagogy which are constantly changing.
- Teacher education should be open, flexible and not prescriptive and should put emphasis on the changing contexts and empower teacher trainees to relate her/him to them.
- The programme should equip teacher trainees with a set of competences to

facilitate quality learning and cater for national priorities such as literacy, numeracy and inclusion

- Acknowledge the existence of a diversity of learning spaces and curriculum sites such as the farm, work place, home, community apart from the classroom.
- Teacher education should be liberal, humanistic and responsive to demands of society.
- Teachers to be trained in organizing learner-centered activity based, participatory learning experiences like play, projects, discussions, dialogue, observation, visits, integrating academic learning with productive work.

### Findings

- It may be observed that the institutional cultures of pre-service teacher education which is in vogue in India are also a consequence of their position in a system of higher education. The bulk of secondary teacher education institutes offering programmes leading to the B.Ed. degree are outside university campuses. Elementary teacher education institutes, including DIETs, offering programmes leading to a Diploma in Education (D.Ed./DEI.Ed.) are not linked to universities. Teacher education institutes function as closed spaces with the sole mandate of 'training' teachers.
- Trainees conceptualise teaching as a problem solving enterprise- addressing multiple problems in practice.
- Many trainees said that they did not feel the need to develop their own theories which could be more practical.
- There was ambiguity in the meaning of *theory* and how this was interpreted by the trainees. They interpreted theory mainly as 'professional knowledge'.

- Many respondents said that they only gave demo class on the day of the exams which did not allow them to develop their understanding of application of theories.
- Many practicing teachers felt that there was a wide disparity between what they theorised and what is the new demands of the new education system which is very challenging.

### Problems

It is required by the trainee teachers to make the connections between the course of study of the practice or model school, and the wider horizons of learning coming within their purview. But it is consecutive and systematic exercise to consider the subject matter of the practical schools that is needed. The habit of making isolated and independent lesson plans for a few days' or weeks' instruction in a separate grade here or there does not serve the purpose, but is rather detrimental. What is needed is the habit of viewing the entire curriculum as a continuous growth, reflecting the growth of mind itself. However, initial teacher preparation, both at the elementary and secondary levels, is facing a number of problems; some of them are common while others are specific. The current dominant teacher education programmes offer ritualistic exposure to theoretical knowledge which is neither linked to the larger aims of education and disciplinary knowledge, nor to the ground realities of classroom practice. Various knowledge domains such as educational psychology, sociology of education and philosophy of education are placed together in teacher education. This is neither learner centric nor classroom specific. Various problems faced by the teachers are:

1. There are hardly any changes made in the syllabus or curriculum problematic structures.

2. The course instructors are not involved with teacher candidates' practicum experiences.

3. Lack of contact with teachers and trainees during the practice period.

4. Lack of program coherence and consistency.

5. Instructors lack the actual elementary and higher level school experience.

6. Lack of co-teaching with teachers from the field.

7. No provision of follow-up after course completion.

8. No meaningful linking of theory and practice.

### **Strategies for effective connection of theory to practice**

Effectiveness can be gained by forming working relationships with teachers and partners in the community, forming a forum and working collaboratively with peers.

*Some strategies that I have found to be effective to link theory and practice-*

- a. Transferring Theoretical Knowledge about Teaching Methods into Real Classes: To observe instructors as they teach real students is very useful for teacher candidates in transferring theory to real classes. Respondents indicated that this activity is more beneficial and effective than preparing a lesson plan and practicing it.
- b. Reflective Teaching
- c. Journal writing
- d. Research
- e. Peer Coaching
- f. Team Teaching
- g. Collaborative teaching
- h. Forming Online Learning platforms
- i. Micro teaching and Action Research.

### **The Role of the Contemporary Teacher & Paradigm Shifts in Teacher Education**

Recently through a high powered commission on teacher education (Justice Verma Commission) constituted by the Supreme Court of India (2011) and a follow-up of its recommendation under the rubric Vision of Teacher Education in India – Quality and Regulatory Perspective, the NCTE has engaged

itself with issues related to improving the quality of the entrants, the envisioned profile of a teacher, in-depth understanding of the school curriculum vis-à-vis teacher education curriculum. It has also given due thought to the question of improving the pedagogical practices to influence the dynamics of a new classroom vision as well as the methodology to assess whether a teacher education system has been successful in producing teachers with the envisioned profile.

There is renewed focus on the concept of teaching, the nature of teacher's engagement with learners, and about the nature of learner's engagement with knowledge. The National curriculum framework (2009) emphasizes constructivism and recommends that curriculum should help learners to become constructor of knowledge and emphasize active role of teachers in relation to the process of knowledge construction according to which textbooks at primary education level are developed. Today's student teachers are facing diverse expectations of the changing educational environment. They are often required to give their best and assume diverse roles within a stipulated time. The Resources (e.g. available time, high quality teaching materials, equipment, facilities, expert and technical support, new teaching methods, etc) often become a critical factor in accomplishing the assigned tasks and meeting diverse goals and expectations. Therefore, teachers are deemed effective if they can maximize the use of allocated resources in their work processes and procure the needed support to overcome difficulties and accomplish different tasks even with diverse and competing goals. Therefore, teacher education aims at helping teachers- i) to understand the nature and importance of resource input to working and teaching processes and achieving planned tasks and education outcomes, ii) to procure and manage scarce resources and maximize their use for teaching and school work; and iii) To have social power and skills to win the support and resources from stakeholders. The student teachers should realize that they are entering

such a profession where life-long learning is important and they are creating a knowledge base. Further, teachers need to view learners as active participants in their own learning and not as mere recipients of knowledge. The trainees should encourage learners to construct knowledge and ensure that learning shifts away from rote methods. The quality and standard of the curriculum of teacher education must be enriched in the light of global experiences incorporating the findings of researches in different disciplines having implications for teacher education. NCTE stresses on shifting from teacher centric stable design to learner centric flexible process of teaching. This shift not only discards teacher-centricism in education but accepts learner-centricism for the all round development of the learners. Teaching is a profession and teacher education a process of professional preparation of teachers with organized body of knowledge, a reasonable duration of formal and rigorous professional training blended with practical experience in the field and a code of professional ethics that binds its members into a fraternity. The programme should facilitate teacher trainees' personal development and their growth into their professional role, enabling them to become responsible, trustworthy, effective and reflective practitioners.

Initiatives were taken by NCTE to bring in a major shift from teacher guidance and monitoring to the open area of facilitation support and encouragement of the learner. Thus the paradigm role of the teacher is as a facilitator and a supporter who encourages the learner in learning also. Placing value on learners' knowledge helps them feel more capable of playing a larger role in their own learning. Though there are various theories of learning, the most applicable theory is psycho analytical as it helps the trainee on understanding critical self reflection and reflective practice which results in meaningful teaching practice. As we engage in the act of envisioning the role of the teacher and the shape of teacher education unfolding in the

coming years, it would do us well to take note of the movement of ideas, globally, that have led to current thinking on teacher education.

### **Conclusion**

All the respondents agreed that theory in educational research and practice cannot be segregated. 80% of them said that theory helped to explain how certain educational phenomena occur and provides a framework to develop a deeper understanding of practice. 60% of the respondents said theory provided education research and practice with a critical framework for dealing with education problems. They further said that theory helped them to think about the classroom, and to relate classroom experiences to known theory. About 70% of the respondents said integrating theory and practical can then mean that if theory is applied in the actual classroom contexts, then practice is the context where theory can be applied. As Allen (2009) has suggested that, "Linking of theory to practice might be addressed through "practicum-type periods in schools . . . when students put into practice the concepts and theories explored on campus, target[ing] a range of standards against which students must demonstrate competence in order to proceed in the program". On the other hand, if the problem of integrating theory and practice is seen as the problem of helping teacher candidates develop practical wisdom, then learning to teach is not a matter of bridging acquired theoretical knowledge with practical experiences, but rather, developing practical wisdom *within* a practical context through reflection (Korthagen, 2001). To bridge this gap, the use of case methods in teacher education has been a useful tool to help students to apply knowledge in the complex classrooms and to practice making good decisions with classroom situations.

We can say that it is necessary for teachers to acquire the necessary theoretical foundation in order to understand the cultural, political, social and economic concerns which impact the stakeholders. Through interview we found that in training, theory mainly functions as a basis for

orientation for reflection on practice. We can further say that, the application of theory can reduce the possibility of making incorrect instructional decisions in teacher education. Learning is to be viewed as a search for meaning out of personal experiences and knowledge generation as a continuously evolving process of reflective learning.

In conclusion we can say that the elementary and high schools, which serve as schools of observation and practice, should represent an advanced type of education properly corresponding to the educational theories and principles learnt, to make teaching more realistic.

### Recommendations

- The role of theory and practice should not be undermined and should be dealt within mentor programmes.
- The teaching of theories should be clearly related to practical considerations especially the teacher trainees should practice teaching the classes that eventually they would join once the training is over.
- Trainees should be encouraged to develop their own theories that are grounded in practice.
- Trainee teachers should follow blended learning approaches and action research.
- Trainees' competencies should be documented through portfolios, journal writing and self reflection which should be noted in their personal diary.
- Knowledge and understanding of the main research methods in education, recent theories
- of learning, teaching and schooling, applying theories, critical thinking should provide for a platform for learning.
- The pass-out teacher trainees should form their own teacher group/forum and share their new experiences so that

it helps others to relate to their teaching situations.

- Teacher education must engage with theory along-with field experiences to help to develop sensitivity to the problems of the learners.

### References

Allen, J.M (2009) Valuing practice over theory: How beginning teachers re-orient their practice in the transition from University to workplace. *Teaching and Teacher education*, 25: 647-654.

Brouwer, C. N. (1989). *Geïntegreerdlerarenopleiding, principes en effecten* [Integrated teacher education, principles and effects]. Amsterdam: Brouwer.

Cheng, M. M. H., Cheng, A. Y. N. & Tang, S. Y. F. (2010): Closing the gap between the theory and practice of teaching: implications for teacher education programmes in Hong Kong. *Journal of Education for Teaching*, Vol 36, No. 1, pp. 91-104.

Darling-Hammond, L. (2006): Constructing 21st-century teacher education. *Journal of Teacher Education*, Vol 57, No. X, pp. 1-15.

Deb, N. (2013) Paradigm Shift in Teacher Education: Role Played By NCTE *International Research Journal of Social Sciences* Vol. 2(4), 24-27. Available online at: [www.isca.in](http://www.isca.in)

Emmer, E. T., & Stough, L. M. (2001). *Classroom management: A critical part of educational psychology, with implications for teacher education*. *Educational Psychologist*, 36, 103–112. [10.1207/S15326985EP3602\\_ed.](https://doi.org/10.1207/S15326985EP3602_ed.) Upper Saddle River, NJ: Prentice Hall.

Elliot J. (1993) *Reconstructing Teacher Education*. London Palmer Press.

Feiman-Nemser, S., & Floden, R. (1986). The cultures of teaching. In M. Wittrock (Ed.), *Handbook of research on teaching* (pp. 505-526). New York: Macmillan.

Hargreaves, D. H., (1999) The knowledge-creating school. *British Journal of Educational* 1. Theory and Practice: Dichotomies of Knowledge? Prepared for an invited panel on "Beyond Dichotomies: Theory vs. Practice" at

the annual meeting of the Comparative and International Education Society.

Higgs, L.G. (2010) Theory in educational research and practice in Teacher Education, *Excellence in Higher Education, Vol 20, pp 31-45*.

Kagoda, A.M (2011) Role Models and Life Histories of Teacher Trainees as tools for Effective Teacher Education: A Case of Geography Teacher trainees, school of Education, Makerere University, Uganda In *Academic Research International Vol 1 Issue 3*.

Kessels, J. P. A. M., &Korthagen, F. A. J. (1996). The relationship between theory and practice: Back to the classics. *Educational Researcher, 25*, 17-22. Koetsier, C. P., Wubbels, Th., & Korthagen, F. A.

Korthagen F, and Kessels J.,(2007) Linking Theory and Practice: Changing Pedagogy of Teacher Education, *Educational Researcher, 29(4), 4-17*.

Korthagen, F., Loughran, J. & Russell, T. (2006): Developing fundamental principles for teacher education programs and practices. *Teaching and Teacher Education, Vol 22*, pp. 1020-1041.

Merseeth, K.K. (1992). Cases for decision making in teacher education. In Shulman (1992), *Case methods in teacher education*. NY: Teachers College Press.

National Curriculum Framework for Teacher Education (2009) from [portal.unesco.org](http://portal.unesco.org)., retrieved on July., (2018)

Nunan, D. (1995). Closing the gap between learning and instruction. *TESOL Quarterly, 29*, 133–158.

Phelan, A. M. (2005). On discernment: The wisdom of practice and the practice of wisdom in teacher education. In G. Hoban (Ed.), *The missing links in teacher education design* (pp. 57-73). Dordrecht, The Netherlands: Springer.

Schon, D.A. (1983). *The reflective practitioner*. NY: Basic books.

Shawer, S. F. (2006). *Effective teaching and learning in generic education and foreign language teaching methodology: Learners' cognitive styles, foreign language skills instruction and teachers' professional development*. Cairo: Dar El-Fikr El-Arabi.

Shulman, L. S. (1998) Theory, practice and the education of professionals, *The Elementary School Journal, 98* (5), 511-526. May.

Siddiqui, M.A. (Ed) (2009) National Curriculum Framework for Teacher Education (2009). New Delhi.

Stofflett, R. T. & Stoddart, T. (1994): The ability to understand and use conceptual change pedagogy as a function of prior content learning experience. *Journal of Research in Science Teaching, Vol 31*, pp. 31-51.

Stuart J. Akyeampong and Groft A (2009) (eds). Key Issues in Teacher Education. A Source Book for Teacher Education In Developing Countries. Oxford Macmillan.

Wideen, M., Mayer-Smith, J., & Moon, B. (1998). A critical analysis of the research on learning to teach: Making the case for an ecological perspective on inquiry. *Review of Educational Research, 68(2)*, pp. 130-178.

Weiler, H.N.(1984) The Political Dilemmas of Foreign Study, *Comparative Education Review 28, 2* (May 1984), 168-179 (also in Elinor G. Barber, Philip G. Altbach, and Robert G. Myers (eds.), *Bridges to Knowledge: Foreign Students in Comparative Perspective*. Chicago: University of Chicago Press, 1984, 184-195).

Weinstein, C. S. (1996). *Secondary classroom management: Lessons from research and practice*. N.Y: McGraw-Hill.

Zeichner, K. M. & Liston, D. P. (1987). Teaching student teachers to reflect. *Harvard Educational Review, 57(1)*, 23-48.Ω

