The Path to More Efficacious Teacher Preparation: The Role of Adequate Coursework and Practicum Factors

Ayalew Beza

Abstract- This study explored how well perceived adequacy of coursework and practicum context factors (Job comfort, mentoring support, and workload) explained student teachers’ efficacy. Data was collected via a survey questionnaire administered face-to-face to all student teachers (N = 97, or 90%) who engaged in a practicum at secondary schools (grades 9 & 10) in south-west Ethiopia during 2013 academic year. The multiple linear regression analysis revealed a moderate fit model ($R^2 = 0.335$), in which 33.5% of the variance in teacher efficacy was attributed to the predictor variables considered in this study ($F_{8, 66} = 4.164, P<0.001$). Perceived coursework adequacy ($\beta = 0.420$) followed by job comfort ($\beta = 0.366$) remained stronger and positive predictors of student teachers’ efficacy. On the other hand, student teachers’ efficacy was related to sex and placement site, where females and those placed at Gambella site were predicted to be less efficacious, indicating further area of concern to address the observed gap.

Index Terms- coursework, practicum context, job comfort, student teachers’ efficacy, placement site

I. INTRODUCTION

Growing body of evidence suggests that among all educational resources, teacher quality is the crucial contributor to students’ learning (Darling-Hammond, 2006; Eide, 2004). Closely related to this, teacher efficacy, which is cognitive judgment that teachers hold regarding their capacity to take action and succeed has a powerful influence on their teaching effectiveness (Ashton, 1984; Bandura, 1977; Betz and Hackett, 2006; Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998). Teacher efficacy has been discovered to be the strongest predictor of teacher enthusiasm, commitment to teaching profession, career satisfaction, and superior performance; and hence, are powerful determinants of the level of success that individuals can attain. Teachers with high levels of self-efficacy believe that THEY can bring about positive outcomes in their students performance, even in the face of challenges while those with a weak sense of self-efficacy tend to surrender when facing difficulty (Blackburn and Robinson, 2008; Bandura, 1977, 1993; Borko & Mayfield, 199; Klassen and Chiu, 2010).

Furthermore, Teacher efficacy is considered powerful for its cyclic nature. Greater efficacy leads to greater effort and persistence, which leads to better performance, which in turn leads to greater efficacy. To the reverse, lower efficacy leads to less effort and giving up easily, which leads to poor teaching outcomes, which then produce decreased efficacy (Tschannen-Moran, et. al., 1998, p.234). Considering the effects of teacher efficacy on their behavior and the resultant student outcomes, strengthening ways of preparing more efficacious teachers should be taken as an avenue by those working to improve student learning outcomes. In line to this, scholars affirm the need to single out factors that support the development of strong and enduring efficacy beliefs, particularly that of beginning teachers as efficacy is most flexible early in learning and it become somewhat stable with years of experience (Ashton, 1984; Bandura, 1977; Hoy, 2000; Tschannen-Moran, et. al., 1998).

Sources of Teacher Efficacy

There are four suggested sources of efficacy information: mastery experience, vicarious learning or observing others (models), verbal persuasion or feedback on performance, and emotional state in a teaching situation (Bandura, 1997; Tschannen-Moran et al., 1998). Furthermore, the major influences on efficacy beliefs are assumed to be the attributional analysis and interpretation of these four sources of information against the specific teaching context. Therefore, making an efficacy judgment encompasses both an assessment of personal competence and an analysis of the task in terms of the resources and constraints that exist in particular teaching contexts (Tschannen-Moran et al., 1998). When it comes to beginning teachers pre-service teacher preparation programs are recognized as the sole sources of their efficacy information. Vicarious experiences and verbal persuasion are provided via the reading, listening, and interaction involved in the teacher education curricula, and all four efficacy sources, particularly mastery experiences, are available during field experiences (Bandura, 1997; Hoy, 2000; Tschannen-Moran et al., 1998; Wanzare, 2007).

Coursework give teachers information about the task of teaching and learning experience that can contribute to teachers’ competence. Particularly, mastery experience is the most powerful source of efficacy information as it directly influences self-perception of teaching competence (Bandura, 1997; Tschannen-Moran, et al., 1998). Programs that give candidates more opportunities for actual experiences and specific feedback encourage a compounding sense of efficacy over various skills than programs which simply require prospective teachers take certain number of courses and which incorporate extensive verbal input (Tschannen-Moran, et al., 1998). Others suggest the most critical components of effective teacher preparation program to include “tight coherence and integration among courses, between coursework and clinical work in schools” (Darling-Hammond, 2006, p.302).
In the same vein, the context of practicum (clinical practice) needs attention as some characteristics of the schools might affect the development of beginning teachers’ efficacy beliefs. Social cognitive theory (Bandura, 1977) proposes that behavior, cognitive, and other personal factors, and the environment interact to influence each other through the process of reciprocal determinism. Practicum is a critical component of teacher preparation programs during which prospective teachers experience the complexity of teaching and develop competence in the professional roles for which they are preparing. “No amount of coursework can, by itself, counteract the powerful experiential lessons that shape what teachers actually do” (Darling-Hammond, 2006, p.308). Likewise, scholars in the field advise teacher preparation programs not to send candidates into school settings where they are constrained to learn, and less likely experience successes, as that has been shown to lower teacher efficacy (Darling-Hammond, 2006; Hammerness et al., 2005; Villegas-Reimers, 2005). Rather, effective clinical experiences are carefully planned, undertaken with highly effective classroom teachers/mentors, and carefully supervised (Cooper and Alvarado, 2006; Darling-Hammond, 2006).

The Current Teacher Preparation Program

Teacher preparation in Ethiopia has been through regular scrutiny and renewal though it still stagger to produce graduates who are competent in subject areas and who can effectively promote the learning of students in schools (MOE, 2009). Noting the problem that teaching has still failed to attract highly able candidates, the government has launched a new teacher education program as of June 2011 with the aspiration of attracting competent and motivated candidates to the teaching profession (MOE, 2003, 2009, 2011; UNESCO/IICBA, 2005). The new teacher education program named “Post Graduate Diploma in Teaching (PGDT)” provides one-year professional (pedagogical) preparation, and thus, candidates are required to possess a bachelor degree in one of the disciplines taught at secondary schools to be eligible.

The program (PGDT) is structured into three terms as “in-out-in”. Meaning, candidates complete the training two terms boarded “in” the universities and one term “out” at secondary schools. During the first term, candidates are offered coursework (17 credit hours or 47%) in universities for three months (July, August, and September). Next, they remain out of universities and spend the rest two semesters (October-June) at secondary schools doing practicum as well as coursework (5 credit hours) on distance basis. Finally for the third term (post-practicum), they are required to be enrolled at their universities for the remaining coursework preparation (14 credit hours or 39%) at exactly the same duration as the first term (MOE, 2009; 2011).

Once student teachers are deployed for practicum, roles of universities become insignificant since the task of assigning practicum coordinator and mentors to each and every teacher is the main responsibility of those schools recruiting new teachers. Ministry of education has made it clear that partner schools are expected to recruit or assign a school practicum coordinator, ensure that mentors are assigned to each and every student teacher, ensure that every student teacher has the correct amount of school experiences in appropriate grade level and subject (MOE, 2011). Apart from the random placement of candidates for clinical practice at public secondary schools, the context of student teaching and adequacy of their coursework preparation has not been established. Thus, exploring which elements of the current PGDT program may account for the variation among student teachers’ efficacy could inform possible areas of intervention in the course of preparing better future teachers.

Objectives

The main purpose of this study was to explore how coursework and practicum context of a teacher preparation program relate to student teachers’ efficacy. The guiding questions were:

- How well perceived adequacy of coursework and clinical context factors in PGDT Teacher Preparation Program explain student teachers’ efficacy?
- How does student teachers’ efficacy relate to individual predictors of coursework and clinical context factors (Job comfort, Mentoring support, Workload, & placement site)?

II. METHODS

Participants

This study involved all student teachers (N = 97) who engaged in a one-year long practicum at secondary schools (grades 9-10) in south-west Ethiopia during 2013 academic year. The student teachers (Male=83%, Female=17%) reported teaching in academic streams of social science (36%), physical/natural science (43%), and language (21%). They handled 14 hours average weekly teaching load with a standard deviation of 5.7 hours. Majority of the student teachers were placed at sites of Gambella (61%) followed by Oromiya (22.5%) and SNNP (16.5%) respectively.

Data Collection

Data was collected using a survey questionnaire administered face-to-face during a reflection workshop organized for all student teachers by Jimma University at six respective zones in southwest Ethiopia. The workshop was conducted after the student teachers had taught three-fourth of the second semester. In addition, it was reported that all practicing teachers had taught the whole first semester independently, handling normal load as regular teachers.

The instrument has four parts: the first sought general information about the respondents, and the rest three sections comprised scales measuring Teacher Sense of Efficacy (TSE), perceived adequacy of Coursework and practicum factors.

Teacher efficacy. It is a summated score of 12 items on Teacher Sense of Efficacy Scale (TSES) developed by Tschanen-Moran & Woolfolk Hoy (2001). The scale with its three domains of Classroom Management (CM), Instructional Strategies (IS) and Student Engagement (SE) was measured on a 9-point Likert scale has been tested for its accuracy in various contexts and accepted as superior to previous measures of teacher efficacy (Klassen and Chiu, 2010; Tschanen- Moran and Woolfolk Hoy, 2001). Moreover, the TSES scale in this study also met the generally recommended Cronbach alpha level;
it was .89 for the 12 items and .71, .68 and .78 for instructional strategies, student engagement, and classroom management subscales respectively.

**Coursework adequacy.** is a summated scale asking whether university-based courses incorporated sufficient and relevant learning experiences which increase the proficiency required to teach at secondary schools. The scale comprised items which were recognized as sources of teachers’ efficacy in social cognitive theory (Ashton, 1984; Bandura, 1977; Tschannen-Moran et al, 1998) such as mastery experience, modeling (vicarious learning) and feedback (social persuasion). Respondents were asked to indicate the extent they agree/disagree to 12 items on a 7-point scale from strongly disagree (=1) through to strongly agree (=7). Average summation of responses on all the items was used as index of coursework adequacy (Cronbach’s alpha=.86).

**Practicum context.** was conceptualized in this study as school contextual factors that compose the environment and the circumstances in which clinical practice occurred (Tschannen-Moran, et al., 1998; Wanzare, 2007). Accordingly, three composite measures of practicum context: (a) Job Comfort, (b) Mentoring Support, and (c) Workload, which are believed to be relevant descriptors of school context were considered as explanatory variables of student teachers’ efficacy.

- **Job comfort** is perceived satisfaction of the conditions under which the teaching job is performed during clinical practice (Evans, 1997). The current tool is a summation of 8 items asking respondents’ degree of satisfaction about students, classroom situations, teaching resources, staff and administrative support, measured on a scale of 1 (very dissatisfied) – 7 (very satisfied). Cronbach alpha was .72 for the summated scale of job comfort.

- **Mentoring Support:** Perspectives held by student teachers about the adequacy of support received from school mentors in clinical practice settings. The scale of mentoring support comprised a total of 14 items, developed from the purposes of mentoring reflected in MOE (2009; 2010). The respondents were asked to rate whether they received valuable support (both personal & career related) on a 5-point scale of “Strongly Disagree” (=1) through to “Strongly Agree” (=5). The scale had a reliability coefficient of .88.

- **Workload:** was a scale constructed to measure student teachers’ perception about their teaching assignments. Respondents were asked to indicate the extent they agree/disagree to four items concerning suitability of tasks they had been given during their practice teaching on a 5-point rating scale. An index was generated by summing the four items, where higher score on the scale signifies suitable workload whereas lower score indicates the reverse (alpha=.60).

In order to ensure validity, primarily the collection of items used to measure each variable in this study was adopted from similar previous tools and the expectations reflected in the official document (MOE, 2009; 2010) about courses and practicum. Moreover, the draft instrument was examined by panel of experts and finally pilot tested on a sample of accessible student teachers (N=12), modifications were made to some items such that they are appropriate for use.

**Data Analysis**

Statistical analyses were conducted using SPSS version 16. Descriptive statistical techniques including frequency distributions, means and standard deviations were used to summarize the background characteristics of the respondents. ANOVA and chi square were also used to test the difference of some contextual variables by placement site and sex. Moreover, multiple regression was used to estimate the amount of variance in Teachers Efficacy explained by all the predictors altogether as well as to look at the relationship between Teachers Efficacy and each predictor separately (Hite, 2001; Muijs, 2004). All statistical tests employed an alpha level of .05. The subsequent section presents the result pertinent to objectives set at the beginning.

### III. RESULTS

**The explained variance in student teachers’ efficacy**

All variables included in the model were relevant components of a teacher preparation program, and are theory-based suggestions as sources of teachers’ efficacy. Predictor variables considered were perceived adequacy of Coursework, practicum context (Job comfort, Mentoring support, & Workload), and demographic variables of Sex & Practicum Site. As required in multiple regression analysis, nominal predictors (‘Sex’ and ‘Practicum Site’) were transformed in to dummy variables. Amongst the three categories of “practicum site”, two dummy variables (SNNPR and Gambella) were created and Oromiya remained a referent group. The other demographic variable “Sex” was originally dummy coded with males=0 and females=1.

The amount of variance in teachers’ efficacy explained by all the predictors was measured by R-squared in regression analysis (table 1). The multiple linear regression analysis result for the total efficacy scale revealed a moderate fit model (R2 =0.335), where 33.5% of the variance in teacher efficacy was attributed to the predictor variables considered in this study (F8, 66 =4.164, P<0.001).

www.ijsrp.org
With additional analysis on Teachers’ Efficacy sub-scales, the model resulted in a bit higher coefficient for the Instructional Strategy subscale ($R^2 = 0.350$). On the other hand, the model explained a relatively reduced amount of variance on Classroom Management and Student Engagement subscales, each having R-squared of 0.272 and 0.270 respectively.

The relationship of student teachers’ efficacy to individual predictors

In examining the relative strengths of individual predictors to explain teachers’ efficacy, the standardized beta coefficient was used. Accordingly (table 2), beta is strongest for Coursework adequacy ($\beta = .420$) followed by Satisfaction with job conditions ($\beta = .366$), high scores on both constructs predicting higher student teachers’ efficacy. Sex ($\beta = -.355$) and practicum site ($\beta = -.328$) were also found modest predictors of student teachers’ efficacy. While Females reported 1.007 fewer average efficacy scores than men do ($P<0.01$), student teachers placed at both Gambella ($B = -.930$) and SNNPR ($B = -.317$) school settings scored less than those placed in Oromiya region, though this relationship remained significant only for Gambella site ($t=.603$, $p<0.01$). On the other hand, number of Hours taught per week ($\beta = -.010$), Mentoring support ($\beta = .013$), and Workload ($\beta = .058$) were found weak predictors of student teachers’ efficacy.

Table 2: Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>3.860</td>
<td>1.304</td>
<td>2.961</td>
</tr>
<tr>
<td></td>
<td>Sex</td>
<td>-1.007</td>
<td>.315</td>
<td>-.355</td>
</tr>
<tr>
<td></td>
<td>Hour</td>
<td>-.006</td>
<td>.025</td>
<td>-.029</td>
</tr>
<tr>
<td></td>
<td>WL</td>
<td>.079</td>
<td>.166</td>
<td>.057</td>
</tr>
<tr>
<td></td>
<td>SNNPR</td>
<td>-.317</td>
<td>.288</td>
<td>-.143</td>
</tr>
<tr>
<td></td>
<td>Gambella</td>
<td>-.930</td>
<td>.357</td>
<td>-.328</td>
</tr>
<tr>
<td></td>
<td>JoC</td>
<td>.392</td>
<td>.126</td>
<td>.366</td>
</tr>
<tr>
<td></td>
<td>MentSup</td>
<td>.114</td>
<td>.170</td>
<td>.077</td>
</tr>
<tr>
<td></td>
<td>CW</td>
<td>.419</td>
<td>.119</td>
<td>.420</td>
</tr>
</tbody>
</table>

a. Dependent Variable: TSE

IV. DISCUSSION

Teacher efficacy is partly shaped by the individual’s comparative judgment of whether his/her current abilities are adequate for the teaching task in question (Tschannen-Moran, et al., 1998). The result of this study showed that, among the presumed predictors, perceived coursework adequacy remained the strongest explanatory variable of student teachers’ efficacy ($\beta = .420$, $p<0.01$). Higher ratings of coursework adequacy predicted higher teacher efficacy. The relevant explanations for this result is that coursework give teachers learning experiences which contribute to develop a set of knowledge, skills, and dispositions essential to what they actually do in schools (Bandura, 1997; Tschannen-Moran, et al., 1998). Previous studies indicated that beginning teachers who felt better prepared were more likely to believe they could make a difference in the life of their students (Knobloch, 2006). People develop biases depending on their preexisting beliefs, the kinds of attributions they make, and the sources of information they attend to or consider important (Bandura, 1997).

The other crucial issue shaping teacher efficacy is belief about the task requirements in a particular teaching situation,
including an assessment of resources and constraints external to the
teacher (Tschanzen-Moran et al. 1998). The analysis of the
task will be more salient in shaping efficacy beliefs when
teachers lack experience or when tasks are novel (P.233). Of the
presumed practicum context factors in this study, satisfaction
with job conditions remained significant predictor of student
teachers’ efficacy (β=.366, p<0.01) next to coursework
adequacy. The scale covered such factors as the students' ability
and motivation, instructional materials, school facilities, school
leadership, and support from other teachers. Despite its strong
contribution to explain student teachers’ efficacy, respondents
exhibited dissatisfaction with job conditions (M=3.5, SD=1.1).
Moreover, candidates rated mentoring support unsatisfactory
(M=29, SD=0.8). This result supported previous local findings
concerning practicum aspect of pre-service teacher education in
Ethiopia; that the schooling realities student teachers are made to
experience as a practicum, the inadequacy of expertise, school
disorientation and reluctance to cooperate, and incompatibility of
practicum activities with the prevailing traditional practice were
cited as important limitations to the successful implementation of
practicum (Kedir, 2006; Dawit, 2008).

Concerning placement site, respondents from Gambella site
reported significant fewer efficacy score than those from
Oromiya region (B= -.907, p<0.01). In addition, the study
revealed differences between the two practicum settings on two
measured variables: weekly load and grade level taught.
Respondents assigned at Gambella taught fewer weekly hours
(M=10.4) than respondents from Oromiya schools do (M=16.2)
(F= 5.380, p = 0.006). Concerning “grade level taught”, none of
the respondents from Oromiya were assigned at primary schools,
compared to more than a third of those in SNNPR (29.5%) and
Gambella (43.8%) regions (chi square = 11.583, df = 2, p =
0.003). Since mastery of difficult tasks enhance feelings of
efficacy (Bandura, 1997), candidates assigned at Gambella
region may have considered teaching at primary schools and
managing fewer weekly loads as less challenging, and thus, a
subsequent low efficacy score. Other possible differences which
might have accounted for the differences could be the extent
student teachers’ background complement to the surrounding
community, as well as other environmental items not included in
this study. Except the use of common national curriculum
framework, the three regions are not necessarily similar in their
educational governance, financing, and other organizational
culture which may account for possible gap in self-efficacy.
Student teachers efficacy was also related to their sex, females
were predicted to score significantly fewer efficacy score than
men do (B= -.1009, p<0.01). The only observed difference
between the two sexes was “responsibility” they assumed during
the whole-year practicum duration (chi square = 7.654, df = 1, p
= 0.006), where majority of males (42.9%) assumed additional
responsibility compared to very few (6.2%) females. Similar to
this result, Liu and Ramsey (cited in Betz, 2007) found that
women experience less job satisfaction from work conditions.
The available argument explaining the observed sex gap in
teachers’ efficacy include traditional gender-role socialization,
confidence, high stress, and less access to hands-on teaching
experience (Betz, 2007; Klassen and Chiu, 2010).

V. CONCLUSION

The central finding of this study was that both perceived
adequacy of coursework and practicum context factors play
decisive role in explaining student teachers’ efficacy. This result
underscores the nature of beliefs teacher candidates develop
about themselves and needs ensuring that they have acquired
strong feelings of adequacy in core areas of their preparation. An
essential strategy could be via educators modeling teaching
strategies that beginning teachers will be expected to use in their
own classes and by making coursework experiences authentic
and responsive to school realities. In order to ensure mastery
experience on key skills required to teach at schools, the
provision of planned and more deliberative field experiences
parallel to coursework is equally advocated (Ashton, 1984;
Darling-Hammond, 2006). This situation may require
reconsideration of the current enrollment modality to university-
based coursework, during when Ethiopia schools are closed for
summer vacation for two months, as it precludes the integration of
coursework with fieldwork.

Equally important is the circumstances in which clinical
practice occur at secondary schools. Given the relative
contribution of practicum context factors to explain student
teachers’ efficacy and the observed dissatisfaction of candidates,
careful selection of practicum partners seems necessary. MOE
had better reconsider the current mode of employment-based
arbitrary practicum placement which may preclude student
teachers from maximizing their sense of efficacy due to the
limited and varying potential of schools to provide favorable
work environment, nurture and support students’ development.

Moreover, efficacy disparity was observed in terms of Sex
and placement site, where females and student teachers placed at
Gambella site were predicted to be less efficacious. This may call
for intervention, mainly, during clinical practice on the unequal
responsiveness of school systems (for example, additional
responsibility for males only, assignment to primary schools and
low weekly load at Gambella site). Further study might be
required to better understand how placement site and sex
influence student teachers efficacy beliefs.

ACKNOWLEDGMENT

I gratefully acknowledge financial support rendered to this
study by Jimma University, college of education and behavioral
sciences. I’m also grateful to my colleagues who offered their
professional help during the validation process of data collection
instrument.

REFERENCES

Teacher Education. Journal of Teacher Education, 35(28)

2. Bandura, A. (1993). Perceived self-efficacy in cognitive development and

change Psychological Review, 84, 191-215.

Emerging Directions. Journal of Career Assessment 15: 403 DOI:
10.1177/106907270305759

www.ijsrp.org


**AUTHORS**

**First Author** – Ayalew Beza, Jimma University (Ethiopia), College of Education and Behavioral Sciences