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Are Prospective Elementary School Teachers’ Social Studies Teaching Efficacy Beliefs Related to Their Learning Approaches in a Social Studies Teaching Methods Course?

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Abstract: This study aimed to contribute to the growing literature on learning approaches and teacher self-efficacy beliefs by examining associations between prospective elementary school teachers’ learning approaches in a social studies teaching methods course and their social studies teaching efficacy beliefs. One hundred ninety-two prospective elementary school teachers for grades 1–4 participated in this study at the school of education at a university in Turkey. Findings showed that the deep learning approach in a social studies teaching methods course was a significant and positive contributor to future teachers’ social studies teaching efficacy beliefs. The findings highlight the importance of stimulating deep learning approaches to improve teaching efficacy.

Keywords: learning approaches, elementary school teacher candidates, social studies teaching methods courses, social studies teaching efficacy beliefs

Introduction

Learning approaches have been among the most intensively studied areas of education for over three decades (Duff, Boyle, Dunleavy, & Ferguson, 2004). Researchers have also shown an increased interest in teacher self-efficacy beliefs in the past three decades that has led to a considerable amount of research in the field (Gencer & Cakiroglu, 2007; Utley, Moseley, & Bryant, 2005; Yılmaz & Çavaş, 2008).

However, as a complex area, study approaches to learning still require more empirical research to explore their associations with various human characteristics (Zeegers, 2004). Likewise, Utley et al. (2005) highlight the need for studying teacher self-efficacy and its relationship to other constructs. Learning approaches may be studied as a general topic, irrespective of the subject matter, as well as being the subject of research in terms of specific subjects, since individuals’ learning approaches may vary from subject to subject (Baeten, Kyndt, Struyven, & Dochy, 2010; Biggs, Kember, & Leung, 2001; Cano & Berbén, 2009; Crawford, Gordon, Nicholas, & Prosser, 1998).

In the same way, in addition to investigating (future) teachers’ self-efficacy beliefs in relation to teaching in general, researchers can also investigate (future) teachers’ teaching self-efficacy beliefs in the context of specific and distinct subject matter (Tschannen-Moran & Woolfolk Hoy, 2001; Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998; Utley et al., 2005). By focusing on social studies, the current study attempts to shed light on relationships between elementary school teacher candidates’ study approaches to learning in a social studies teaching methods course and their social studies teaching self-efficacy beliefs. Through this study, the author hopes to extend knowledge of learning approaches and teaching efficacy in the context of a social studies teaching methods course.
Study Approaches to Learning

In their research with Swedish university students, Marton and Säljö (1976) concluded that in the learning process, students can adopt two different approaches: surface and deep learning (Chotitham, Wongwanich, & Wiratchai, 2014; Drew & Watkins, 1998; Duff et al., 2004).

Naturally, different learning behaviours of individuals reflect different learning processes. The **surface learning approach**, based on extrinsic motivation, refers to memorisation, superficial learning, and study for exams to avoid failure, while the **deep learning approach**, based on intrinsic motivation, refers to meaningful learning that attempts to connect new material to already-learned material (Cano & Berbén, 2009; Chotitham et al., 2014; Drew & Watkins, 1998; Duff, 2003; Thomas & Gadbois, 2007).

For students who are intrinsically motivated and have a deep learning approach, each learning opportunity stimulates even more learning; on the other hand, for students who are extrinsically motivated and have a surface learning approach, “less is more” (Furnham, Christopher, Garwood, & Martin, 2007, p. 1565) and they “aim at learning the minimum amount of material required to pass” (Chamorro-Premuzic, Furnham, & Lewis, 2007, p. 242); that is, deep learning entails more cognitively-active involvement by the individual in the learning process, which is the goal of teachers/educators across all levels of education (Baeten, Struyven, & Dochy, 2013; Biggs et al., 2001; Kreber, 2003).

Studies pertaining to learning approaches have shown that they are associated with other pivotal student outcomes. For example, it was found that there was a positive correlation between deep learning and academic achievement and a negative correlation between surface learning and academic achievement, meaning that the more students used deep learning, the more successful they were in their classes, and the more they used surface learning, the less successful they were (Cano, 2005; Drew & Watkins, 1998; Duff et al., 2004; Furnham et al., 2007; Olpak & Korucu, 2014; Zeegers, 2001, 2004).

Others found a positive relationship between deep learning and academic achievement, but no relationship between surface learning and academic achievement (Chotitham et al., 2014; Davidson, 2002). Still others reported a negative relationship between surface learning and academic achievement, but no relationship between deep learning and academic achievement (Dan & Todd, 2014; Thomas & Gadbois, 2007).

In their study, Thomas and Gadbois (2007) also found that academic self-handicapping was negatively correlated with deep learning, but positively correlated with surface learning, suggesting that students using the latter were more likely to be self-handicapping in their academic work. Drew and Watkins (1998) found associations between learning approaches, locus of control, and academic self-concept. Their findings showed that there was a negative correlation between surface learning and locus of control and a positive correlation between deep learning and academic self-concept. In their studies, Zeegers (2004) and Thomas and Gadbois (2007) examined relationships between learning approaches and test anxiety, and they found a positive correlation between the surface approach and test anxiety, but a negative correlation between the deep approach and test anxiety. In addition, Zeegers’s study also showed that the surface learning approach was a significantly positive predictor of test anxiety.

The relationship between school-subject interest and learning approaches has also been studied. In this respect, Dan and Todd (2014) examined the relationship between history learning approaches and the history interests of students, and they found that there was a negative correlation between interest and surface learning and a positive correlation between interest and deep learning.
The aforementioned studies all highlight the pivotal role of study approaches to learning in relation to student outcomes ranging from cognitive (such as achievement) to emotional (such as subject interest, test anxiety, etc.).

Teacher Self-Efficacy

In the basis of Bandura’s social cognitive theory (1977), teacher self-efficacy could be defined as “individual teachers’ beliefs in their own ability to plan, organize, and carry out activities that are required to attain given educational goals” (Skaalvik & Skaalvik, 2010, p. 1059). Bandura (1977) asserts that “people fear and tend to avoid threatening situations they believe exceed their coping skills, whereas they get involved in activities and behave assuredly when they judge themselves capable of handling situations that would otherwise be intimidating” (p. 194).

Teachers’ beliefs in their teaching abilities can affect their adaptation to new teaching strategies (De la Torre Cruz & Casanova Arias, 2007) or the amount of effort they will expend when facing obstacles in the teaching process (Bandura, 1977). Moreover, the self-efficacy beliefs of teachers and teacher candidates in relation to teaching are reported to correlate favorably with various behavioural and emotional factors (Brouwers & Tomic, 2000; Fives, Hamman, & Olivarez, 2007; Gencer & Cakiroglu, 2007; Knoblauch & Woolfolk Hoy, 2008; Schwarzer & Hallum, 2008; Tschannen-Moran & Woolfolk Hoy, 2001; Yılmaz & Çavas, 2008).

For example, Ghaith and Yaghi (1997) found that the more teachers held self-efficacy beliefs in regard to teaching, the more they had positive attitudes toward implementing new instructional practices. In their longitudinal research, Sandholtz and Ringstaff (2014) examined the relationship between science teaching self-efficacy and teacher practices. They found significantly positive correlations between self-efficacy change and the use of student activities, e.g., participating in hands-on science activities, designing/implementing own investigations, and writing reflective journals, suggesting that when teachers’ self-efficacy beliefs in science teaching increased, their use of student participation activities in science increased (Sandholtz & Ringstaff, 2014).

Gencer and Cakiroglu (2007) showed that the more that student teachers had science teaching efficacy beliefs, the less they adopted an interventionist orientation to classroom management. There have also been investigations into the relationship between self-efficacy beliefs in relation to teaching and emotional perceptions such as burnout, job satisfaction, attitudes, and goal orientations. Fives et al. (2007) and Skaalvik and Skaalvik (2010) found negative correlations between teachers’ self-efficacy beliefs and their level of burnout, suggesting that the more teachers felt self-efficacious in teaching, the less they experienced burnout.

Furthermore, recent evidence suggests that there are positive correlations between teachers’ self-efficacy beliefs and job satisfaction, which suggests the more that teachers hold beliefs of self-efficacy, the more satisfied they are with their jobs (Caprara, Barbaranelli, Steca, & Malone, 2006; Karabıyık & Korumaz, 2014; Skaalvik & Skaalvik, 2010). In an investigation into the relationship between elementary school teacher candidates’ science teaching self-efficacy beliefs and their attitudes towards science lessons, Çelikkaleli and Akbaş (2007) found teaching efficacy beliefs to be a significant and positive predictor of attitudes. Cho and Shim (2013) showed that teacher efficacy beliefs positively predicted mastery and a performance-oriented approach for teaching. In the same vein, Ozkal, Demirtas, Sucuoğlu, and Guzeller (2014) found positive correlations between mastery-oriented approaches and future teachers’
teaching self-efficacy beliefs. Their study also showed that future teachers’ teaching self-efficacy beliefs positively predicted their mastery-oriented approach.

Previous research also linked teacher self-efficacy with student achievement, showing that the former is a positive and significant predictor of student achievement (Caprara et al., 2006; Ross, 1992).

On the other hand, teaching self-efficacy is influenced by a range of independent variables, further supporting the view that acknowledges the malleable nature of self-efficacy (Liaw, 2009; Utley et al., 2005).

For example, math and science teaching self-efficacy beliefs of pre-service teachers were found to be negatively associated with mathematics anxiety levels of participants, indicating that pre-service teachers with low mathematics anxiety had higher levels of self-efficacy beliefs for teaching mathematics and science than pre-service teachers with higher levels of mathematics anxiety (Bursal & Paznokas, 2006).

The study by De la Torre Cruz and Casanova Arias (2007) showed that years of teaching experience had a significant impact on higher level teaching self-efficacy beliefs.

Utley et al. (2005) analysed the impact of mathematics and science methods courses on pre-service elementary teachers’ mathematics and science teaching self-efficacy beliefs. They found that participation in mathematics and science methods courses positively contributed to pre-service elementary teachers’ mathematics and science teaching self-efficacy beliefs. Similarly, Alansari (2010) investigated how concept mapping, as a teaching and learning tool used in a social studies methods course, impacted pre-service teachers’ social studies teaching self-efficacy beliefs, and found that use of concept maps in a methods course significantly increased pre-service teachers’ self-efficacy beliefs in teaching social studies.

In other studies, field experiences (Knoblauch & Woolfolk Hoy, 2008; Liaw, 2009; Wingfield & Nath, 2000; Wingfield, Nath, Freeman, and Cohen, 2000) and perceived cooperating teaching efficacy (Knoblauch & Woolfolk Hoy, 2008) were found to be influential factors in the development of pre-service teachers’ self-efficacy beliefs. Moreover, there is also evidence that teachers’ self-efficacy beliefs may be “culturally oriented” (Lin & Gorrell, 2001, p. 631) and vary depending on subject matter taught (Bursal, 2010; Lin & Gorrell, 2001; Wertheim & Leyser, 2002).

Relationship between Study Approaches to Learning and Self-Efficacy

Although no research could be found in the literature that examined the relationship between elementary teacher candidates’ study approaches to learning in a social studies teaching methods course and their social studies teaching self-efficacy beliefs, other studies show the link between study approaches and self-efficacy beliefs in general.

For instance, in their longitudinal study, Gordon and Debus (2002) found that the deep learning approach contributed significantly to improving pre-service teachers’ personal teacher efficacy beliefs; however, the influence of the surface learning approach on both general teacher efficacy and personal teacher efficacy was found not to be significant. Phan (2007) found that the deep learning approach had a positive impact on self-efficacy beliefs; however, again surface learning was not found to be a significant predictor of self-efficacy. A longitudinal study with university students by Phan (2011) showed that the initial level of the deep learning approach was positively associated with changes in academic self-efficacy beliefs, suggesting that initial level of the deep learning approach adopted by students positively contributes to their developing academic self-efficacy (Phan, 2011). Çuhadar, Gündüz, and Tanyeri (2013) examined the relationship between the learning approaches and academic self-efficacy beliefs of computer education and instructional technology students and
found a positive correlation between deep learning and academic self-efficacy beliefs but could not find a significant relationship between surface learning and academic self-efficacy beliefs.

**Purpose of the Research**

It has been well-established that teacher-related factors (for example, teaching methods, the social environment fostered in the classroom, teacher attitudes towards social studies) affect student perceptions of social studies (Alkis & Gulec, 2006; Chiodo & Byford, 2004; Dündar, Acar Güvendir, Onat Kocabıyık, & Papatga, 2014; Goodlad, 1984; Russell & Waters, 2010; Schug, Todd, & Beery, 1982; Yılmazer & Demir, 2014).

Some studies conducted both in Turkey (Akgül, 2006; Taşkaya & Bal, 2009) and abroad (Bailey, Shaw, & Hollifield, 2006; Bolinger & Warren, 2007; Burstein, Hutton, & Curtis, 2006; Lintner, 2006) found that teacher-centered methods such as lecturing and question-answer sessions are the most frequently used methods in elementary social studies classrooms.

Moreover, research has shown that elementary school teachers’ attitudes towards social studies as a subject are not very positive (Özkal, Gungör, & Çetingöz, 2004; Öztürk & Ünal, 1999) and that they often have difficulty in teaching social studies (Gömölsiz, Öner, & Bozpolat, 2011). Some research (Akgül, 2006) has demonstrated that most rarely utilised historical empathy and social empathy methods in their social studies classes; the main reason for not using these methods, which are particular to social studies, was found to be their lack of knowledge regarding them (Akgül, 2006). As elementary school teacher candidates rely upon the social studies teaching methods course to learn social studies teaching skills, the design and implementation of these courses are critical, especially for imparting instructional methods that are particular to social studies (Burstein, 2009; Leaman & Kistler, 2009; Tay, 2013).

However, studies of elementary school teacher programs reveal that candidates rate the social studies teaching methods course far behind other core teaching methods courses in terms of both necessity and utility (Kılıç & Acat, 2007; Süräl, 2015).

Research that illuminates how teacher candidates can best learn in the social studies teaching methods course, and how to encourage their beliefs of social studies teaching efficacy in this course, would thus address an important deficiency in the perceived and actual effectiveness of the social studies teaching methods course. This study investigates the relationships between prospective elementary school teachers’ learning approaches in a social studies teaching methods course and social studies teaching efficacy beliefs. In particular, the following research questions will be examined:

1. Are there any relationships between elementary school teacher candidates’ learning approaches (deep or surface) in a social studies teaching methods course and their social studies teaching efficacy beliefs (as personal social studies teaching efficacy and social studies teaching outcome expectations)?
2. Do elementary school teacher candidates’ learning approaches (deep or surface) in a social studies teaching methods course predict their personal social studies teaching efficacy beliefs?
3. Do elementary school teacher candidates’ learning approaches (deep or surface) in a social studies teaching methods course predict their social studies teaching outcome expectancy beliefs?
Methodology

This study was conducted using a correlational design (Creswell, 2008). Relationships between the deep learning approach, surface learning approach in a social studies teaching methods course, personal social studies teaching efficacy, and social studies teaching outcome expectancy beliefs were first examined using Pearson’s correlation coefficient. Next, the study utilised multiple regression analysis to test whether personal social studies teaching efficacy and social studies teaching outcome expectancy beliefs were significantly predicted by the deep learning approach and surface learning approach in a social studies teaching methods course (Creswell, 2008; Field, 2009).

Using convenience sampling, 192 prospective elementary school teachers for grades 1–4 participated in this study; all were enrolled in a social studies teaching methods course at the school of education at a university in Turkey. The mean age of the participants was 21.78 (SD = 1.74). Of the participants, 143 (74%) were female and 49 (26%) were male.

The revised two-factor Study Process Questionnaire (R-SPQ-2F), which was developed by Biggs et al. (2001) and adapted to the Turkish language by Yılmaz and Orhan (2011), was used to measure participants’ learning approaches in a social studies teaching methods course. This questionnaire has two factors: the deep learning approach (10 items) and the surface learning approach (10 items) (Biggs et al., 2001; Yılmaz & Orhan, 2011). In their adaptation of the questionnaire, Yılmaz and Orhan (2011) found Cronbach’s alpha coefficients of .79 and .73 for the deep learning approach and the surface learning approach respectively. Participants indicated their opinions on a 5-point Likert scale ranging from never or only rarely true of me (1) to always or almost always true of me (5). In the current study, participants answered the questionnaire for a social studies teaching methods course and Cronbach’s alpha coefficients of .75 and .77 were identified for the deep learning approach and surface learning approach respectively.

To measure participants’ social studies teaching efficacy beliefs, the Science Teaching Efficacy Belief Instrument-B (STEBI-B), which was developed by Enochs and Riggs (1990) and adapted to the Turkish language by Bıkmaz (2002), was used with some modifications in accordance with the study of Wingfield et al. (2000).

The original STEBI-B consists of two sub-scales: a personal science teaching efficacy belief scale (13 items) and a science teaching outcome expectancy scale (10 items) (Enochs & Riggs, 1990). However, in the adaptation of STEBI-B to the Turkish language and culture, Bıkmaz (2002) removed two items as a result of validity and reliability analyses. The study’s findings suggested that the adapted version of STEBI-B, which included 13 items on the personal science teaching efficacy belief scale and eight items on the science teaching outcome expectancy scale for a total of 21 items, could be considered a valid and reliable instrument to use in Turkish culture (Bıkmaz, 2002).

The use of STEBI-B for a subject other than science is not a new approach. Previously, the instrument was modified to be used for subjects such as social studies (Alansari, 2010; Vinson, 1995; Wilson & Tan, 2004; Wingfield & Nath, 2000; Wingfield et al., 2000), the English language (Alansari, 2010), language arts (Vinson, 1995; Wingfield et al., 2000), mathematics (Enochs, Smith, & Huinker, 2000; Vinson, 1995; Wingfield et al., 2000), and history (Hartman, 2010). Since STEBI-B was developed for pre-service elementary teachers’ science teaching efficacy beliefs (Enochs & Riggs, 1990), some modifications were needed to measure their social studies teaching efficacy beliefs.

Mentions of “science” were replaced with “social studies.” Additionally, two science specific items in STEBI-B (“I will not be very effective in monitoring science experiments” and “I will find it difficult to explain to students why science experiments work”) (Enochs & Riggs, 1990, pp. 703–704; Bıkmaz, 2002, p. 210) were replaced with the Turkish translations
of “I will not be very effective in monitoring [social studies] activities” and “I will find it difficult to explain to students why [social studies] is relevant” respectively (Wingfield et al., 2000, pp. 8–9).

Participants indicated their agreement with the items on a 5-point Likert-type scale ranging from strongly agree (5) to strongly disagree (1). In the current study, Cronbach’s alpha coefficients from participants of this study were found to be .78 for personal social studies teaching efficacy belief scale (13 items) and .62 for social studies teaching outcome expectancy scale (eight items).

Findings

The first research question was “Are there any relationships between elementary school teacher candidates’ learning approaches (deep or surface) in a social studies teaching methods course and their social studies teaching efficacy beliefs (as personal social studies teaching efficacy and social studies teaching outcome expectations)?” Pearson’s correlation analysis was performed and the results are shown in Table 1.

As shown in Table 1, there is a positive and significant relationship between the deep learning approach in the social studies teaching methods course and personal social studies teaching efficacy beliefs ($p < .01$) and social studies teaching outcome expectancy beliefs ($p < .05$).

On the other hand, there was found to be a negative relationship between the surface learning approach in the social studies teaching methods course and personal social studies teaching efficacy beliefs ($p < .01$). The surface learning approach did not correlate significantly with social studies teaching outcome expectancy beliefs ($p > .05$).

The second research question was “Do elementary school teacher candidates’ learning approaches (deep or surface) in a social studies teaching methods course predict their personal social studies teaching efficacy beliefs?” For this question, multiple regression analysis was performed and the results are shown in Table 2.

<table>
<thead>
<tr>
<th>Measure</th>
<th>$M$</th>
<th>$SD$</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Deep Learning Approach in a Social Studies Teaching Methods Course</td>
<td>2.67</td>
<td>.58</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Surface Learning Approach in a Social Studies Teaching Methods Course</td>
<td>2.81</td>
<td>.67</td>
<td>-.25**</td>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Personal Social Studies Teaching Efficacy</td>
<td>3.81</td>
<td>.41</td>
<td>.38**</td>
<td>-.20**</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>4. Social Studies Teaching Outcome Expectancy</td>
<td>3.70</td>
<td>.44</td>
<td>.17*</td>
<td>.02</td>
<td>.21**</td>
<td>—</td>
</tr>
</tbody>
</table>

* $p < .05$. ** $p < .01$.

Table 1: Means, standard deviations, and correlations of learning approaches in a social studies teaching methods course and social studies teaching efficacy beliefs

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>$SE$ $B$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>3.35</td>
<td>0.20</td>
<td>17.00</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Deep Learning Approach in a Social Studies Teaching Methods Course</td>
<td>0.25</td>
<td>0.05</td>
<td>.35</td>
<td>5.07</td>
<td>.000</td>
</tr>
<tr>
<td>Surface Learning Approach in a Social Studies Teaching Methods Course</td>
<td>-0.07</td>
<td>0.04</td>
<td>-.12</td>
<td>-1.69</td>
<td>.092</td>
</tr>
</tbody>
</table>

$R^2 = .16, F (2, 189) = 17.53, p = .000$

Table 2: Regression analysis for learning approach variables predicting personal social studies teaching efficacy beliefs
As shown in Table 2, the deep and surface learning approaches in the social studies teaching methods course, taken together, significantly predicted future elementary school teachers’ personal social studies teaching efficacy beliefs, \( F(2, 189) = 17.53, p < .001 \), producing a \( R^2 \) value of .16 which suggested that 16% of the variance in personal social studies teaching efficacy beliefs were accounted by study approaches to learning.

However, \( \beta \) values revealed that only the deep learning approach was a significant and positive contributor to future elementary school teachers’ personal social studies teaching efficacy beliefs \( (p < .001) \).

The third research question was “Do elementary school teacher candidates’ learning approaches (deep or surface) in a social studies teaching methods course predict their social studies teaching outcome expectancy beliefs?” For this question, multiple regression analysis was performed and the results are shown in Table 3.

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>( \beta )</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>3.20</td>
<td>0.23</td>
<td>14.11</td>
<td>.000</td>
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<td>0.06</td>
<td>.19</td>
<td>2.54</td>
<td>.012</td>
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<td>Methods Course</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surface Learning Approach in a Social Studies</td>
<td>0.05</td>
<td>0.05</td>
<td>.07</td>
<td>.95</td>
<td>.345</td>
</tr>
<tr>
<td>Methods Course</td>
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<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

\( R^2 = .03, F(2, 189) = 3.28, p = .040 \)

Table 3: Regression analysis for learning approach variables predicting social studies teaching outcome expectancy beliefs

As shown in Table 3, the combination of the deep and surface learning approaches in the social studies teaching methods course significantly predicted future elementary school teachers’ social studies teaching outcome expectancy beliefs, \( R^2 = .03, F(2, 189) = 3.28, p < .05 \), indicating that 3% of the variance in social studies teaching outcome expectancy beliefs was explained by study approaches to learning. However, only the deep learning approach was a significant and positive predictor in the model \( (p < .05) \).

**Discussion**

The purpose of the study was to examine the relationships between prospective elementary school teachers’ study approaches to learning (deep or surface) in a social studies teaching methods course and their social studies teaching efficacy beliefs (as personal social studies teaching efficacy and social studies teaching outcome expectations). The deep learning approach in a social studies teaching methods course correlated positively with personal teaching efficacy and teaching outcome expectancy beliefs. The results also showed that the surface learning approach correlated negatively and significantly with personal teaching efficacy beliefs, but did not correlate significantly with teaching outcome expectancy beliefs.

Multiple regression analysis revealed that only the deep learning approach was a significant predictor of both personal teaching efficacy and teaching outcome expectancy beliefs. This indicates that the more elementary school teacher candidates adopted the deep learning approach, the more likely they were to have personal teaching efficacy and teaching outcome expectancy beliefs.

This is consistent with past studies (Çuhadar et al., 2013; Gordon & Debus, 2002; Phan, 2007, 2011), which also showed that a higher level in the deep learning approach was related to a higher level of self-efficacy. Moreover, the results of the present study indicate that the more elementary school teacher candidates use the surface learning approach, the lower their
personal social studies teaching efficacy beliefs become. This significantly-negative correlation between the surface learning approach and personal teaching efficacy beliefs and other findings from the current study highlights the importance of developing the deep learning approach in the social studies teaching methods course in elementary teacher candidates to enhance their social studies teaching efficacy beliefs.

Given that students using surface learning acquire the material superficially and focus mainly on memorising (Gordon & Debus, 2002), this finding is not surprising. When students study to learn material solely for examinations, which is one of the indicators of surface approach (Biggs et al., 2001), they are not fully engaging with the subject matter; this may result in a sense of incompetency (Phan, 2011).

It seems that one way of promoting teaching self-efficacy beliefs is to develop deep learning among elementary school teacher candidates. To accomplish this, teacher educators should be cognizant of the fact that students’ study approaches to learning are influenced by teacher-related factors such as the relevance of subject matter, teaching strategies and measurement and evaluation methods (Balasooriya, Hughes, & Toohey, 2009; Cano, 2005; Cano & Berbén, 2009; Zeegers, 2001).

For instance, Chamorro-Premuzic et al. (2007) found a positive correlation between the deep approach and students’ preferences for active learning methods such as discussion, small group learning, lab class and clinical teaching, but the correlation was found to be negative with surface approaches for the same learning method preferences, suggesting that active learning could stimulate the deep learning approaches (Chamorro-Premuzic et al., 2007).

Trigwell, Prosser, and Waterhouse (1999) examined associations between teachers’ approaches to teaching and students’ approaches to learning and found that the instructor-focused information transmission approach was related positively to surface learning; on the other hand, the conceptual change/student-focused approach was related positively to deep learning. Baeten et al. (2013, p. 20) found that “gradually implemented case-based learning environments” in which “lectures gradually made way for a student-centered teaching method” helped to decrease surface learning. Trigwell and Prosser (1991, p. 258) reported that the greater the degree to which the instructor “help[ed] understanding”, “create[d] interest”, set “clear assessment criteria”, provided “clear objectives”, “clear explanations”, and “adequate feedback” the more likely students were to adopt deep approach to study; on the other hand, the more that students perceived the workload to be high and the more they thought assessments were based on memorisation, they were inclined to follow the surface approach (Trigwell & Prosser, 1991).

In the same vein, a study by Kreber (2003) showed that heavy workload negatively predicted deep learning and positively predicted surface learning, indicating that the heavier a course’s workload is perceived to be, the less deep learning and the more surface learning are stimulated.

In addition, facts-oriented assessments were found to be a positive predictor of surface learning and the establishment of clear goals and standards a negative predictor of surface learning, suggesting that the more that an instructor used facts-oriented assessment, the more students developed a surface learning approach, while the more that the instructor set clear goals and standards, the less students developed this approach (Kreber, 2003).

Similarly, a study by Kyndt, Dochy, Struyven, and Cascallar (2011, p. 147) showed that a workload that was neither too much nor too little, but rather “high enough” or at an appropriate level of “workload and task complexity,” promoted the deep learning approach. Moreover, instructors in social studies teaching methods courses should be aware that because teacher-centered methods such as lecturing and question-answer sessions are mostly used in elementary social studies classrooms (Akgül, 2006; Bailey et al., 2006; Bolinger & Warren, 2007; Burstein et al., 2006; Lintner, 2006; Taşkaya & Bal, 2009), teacher candidates
frequently arrive at the social studies teaching methods course with negative experiences that hinder the effectiveness of the social studies teaching methods course (Burstein, 2009; McCall, Janssen, & Riederer, 2008; Owens, 1997; Slekar, 2005, 2006). Instructors thus have the opportunity to eliminate pre-service elementary teachers’ beliefs formed by negative experiences they have had (Angell, 1998; McCall et al., 2008; Owens, 1997). However, though pre-service teachers often hear about student-centered social studies instruction in the social studies teaching methods course, they are unable to “internalize this idea” by simply learning it superficially (Johnson, 2007, p. 197). Therefore, to increase elementary school teacher candidates’ self-efficacy beliefs in social studies teaching, instructors should provoke deep learning by requiring pre-service teachers to practise creating opportunities for discussion, and role modelling/practising social studies teaching strategies that they aim pre-service elementary school teachers to gain in the social studies teaching methods course (Burstein, 2009; Leaman & Kistler, 2009). A study by Slekar (2005) found that the use of role playing, primary and secondary documents, empathy, historical imagination, and document interpretation in the elementary social studies methods course helped elementary teacher candidates inquire and develop their own social studies teaching.

Burstein (2009) took the social studies methods course to the real classrooms using a “professor-in-residence” method, which afforded pre-service teachers the opportunity to experience how primary sources and questioning strategies were used in real social studies classrooms. In doing so, pre-service teachers developed social studies planning and teaching skills (Burstein, 2009).

In another methods course modelling study, Kaschak (2014) used museum visit modelling to teach pre-service teachers how to integrate museum visits—one of the important activities in social studies teaching—into social studies. This experience provided meaningful learning for the pre-service teachers and developed their confidence in using museum visits in their own social studies lessons (Kaschak, 2014). These studies highlight the importance of practice, modelling strategies, and active involvement that engages teacher candidates into higher level of thinking about their own social studies teaching and promotes deep learning in the social studies teaching methods course. To stimulate deep learning in the social studies teaching methods course and increase self-efficacy beliefs of elementary school teacher candidates in teaching social studies, instructors should use student-centered teaching strategies and a variety of assessment methods measuring high-level understanding and thinking skills (Davidson, 2002). As asserted by Gordon and Debus (2002), high-level thinking skills, like problem-solving skills, are developed through deep learning, which, in turn, further develops personal teaching efficacy beliefs.

Conclusion

Two limitations of this study need to be considered: data were collected at only one school of education and the study did not evaluate the factors that might influence prospective elementary school teachers’ study approaches to learning in the social studies teaching methods course. Further research might (1), be also conducted at different schools of education, (2), include different variables in the model, specifically those that might affect prospective elementary school teachers’ study approaches to learning in the social studies teaching methods course, and (3), explore the relationship between study approaches to learning in different types of method courses and teaching efficacy beliefs in these courses.
References


