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# Partners in Education: The Teacher Education Done Differently (TEDD) Project

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## Abstract

There has been an abundance of education reform recommendations for teaching and teacher education as a result of national and international reviews. A major criticism in education is the lack of connection between theory and practice (or praxis), that is, how the learning at university informs practical applications for teaching in the classroom. This paper presents the Teacher Education Done Differently (TEDD) project, funded by the Department of Education, Employment and Workplace Relations (DEEWR). It outlines how it has re-structured its offering of coursework in a Bachelor of Education (BEd) held at an Australian university campus to embrace praxis. Establishing partnerships was crucial to the development of this project. TEDD initially gathered a reference group of educators, which included university staff, school executives, and other key stakeholders, who formed an Advisory Group and Steering Committee. These groups formed a collective vision for TEDD and aimed to motivate others, foster team work, and create leadership roles that would benefit all stakeholders. The paper presents how university units changed to include a stronger praxis development for preservice teachers. Preservice teachers take their learning into schools within lead-up programs such as Ed Start for practicum I, III, and IV; Science in Schools, and Studies of Society and its Environment (SOSE). Findings showed that opportunities for undertaking additional real-world experiences were perceived to assist the preservice teachers' praxis development. Additional school-based experiences as lead-up days for field experiences and as avenues for exploring the teaching of specific subject areas presented as an opportunity for enhancing education for all.

**Keywords:** university-school collaborations, praxis, preservice teachers, partnerships

There has been an abundance of education reform recommendations for teaching and teacher education as a result of reviews (e.g., House of Representatives Standing Committee on Educational and Vocational Training [HRSCEVT], 2007; Masters, 2009). A major criticism of tertiary education is the lack of connection between theory and practice (or praxis), that is, how the learning at university informs practical applications for teaching in the classroom and vice versa. Many of these reviews advocate increased field experiences for preservice teachers as there is a strong perception of “the weak link between practicum and the theoretical components of courses” (HRSCEVT, p. xxv). However, one barrier seems to be funding. For instance, in the *Top of the Class Report* “most universities claimed that inadequate funding hindered their capacity to ensure high quality practicum experiences for their students” (HRSCEVT, p. 72). Another related recommendation is the need to form stronger collaborative links between universities and schools for enhancing preservice teacher education (e.g., HRSCEVT, 2007; Masters, 2009). In establishing highly-effective schools with a continuous monitoring process, Masters (2009) shows that advancing university-community partnerships can benefit schools.

The *Top of the Class Report* (HRSCEVT, 2007) calls for studies that “assess the effectiveness of different models of teacher education across Australia” (p. xxii). University coursework for teacher education embeds the notion of developing a professional teaching identity. Teacher identity necessitates personal-professional skill development such as having a rapport with students and communicating clearly with students fosters positive relationships for teaching. Indeed, preservice teachers need to have positive attitudes for teaching and develop pedagogical confidence and expertise. Importantly, reports (e.g., Masters, 2009) suggest that universities need to provide more pragmatic links to theory (i.e., praxis). For instance, coursework can outline education system requirements such as drawing from the presiding syllabus and devising specific aims for teaching subject matter; yet preservice teachers need opportunities to engage with planning material for implementing and evaluating the success of their practices.

Zeichner (2010) contends that one of the greatest challenges for developing competent and confident preservice teachers is connecting the learning from the university to the school context. Indeed, connecting theory with practice (praxis) effectively is a key aim of teacher education programs (Korthagen, Loughran, & Russell, 2006). Korthagen et al. argue that views of knowledge about learning, program structures and practices, and the quality of staff and organisation present underlying principles that can contribute to praxis development. For teaching in schools, tertiary education advocates hands-on activities drawing on theories of instruction (e.g., Bruner, 1966) and social constructivist viewpoints such as Vygotsky (1978). Although coursework may scaffold learning about lesson structures, including devising lesson plans that incorporate content knowledge, syllabus connections, and assessments, preservice teachers may not necessarily make the practical connections without implementing practice within classrooms. For example, assessment strategies for learning encompass the provision of oral and written feedback to students (e.g., Athanassou & Lamprinou, 2002); however preservice teachers need to be aware of the varied personalities within classrooms and how feedback must be tailored to facilitate student learning. Preservice teachers need to make practical sense of theories, advocated in coursework, such as Bloom’s Taxonomy (1956), de Bono’s thinking hats (1985), and Gardner’s multiple intelligences (Gardner & Hatch, 2004). Despite coursework presenting theoretical ways to motivate students for learning and establish a positive emotional climate for effective classroom management (e.g., Canter & Canter, 1997; Glasser, 1992; Kounin, 1977), practical applications present an understanding of the implications of these theories. Furthermore, preservice teachers require practical experiences to evaluate their teaching practices, especially reflecting on practice for pedagogical advancement (Schön, 1983), which is emphasised in Australian teaching standards.

This current paper presents the Teacher Education Done Differently (TEDD) project, funded by the Department of Education, Employment and Workplace Relations (DEEWR). It outlines how an Australian university campus has re-structured its offering of coursework in a Bachelor of Education (BEd) to embrace praxis. Establishing university-school partnerships was crucial to the development of this project. TEDD initially gathered a reference group of educators, which included university staff, school executives, and other key stakeholders that lead to establishing an Advisory Group and Steering Committee (see Hudson & Hudson, 2008). These groups deliberated

on a collective vision for TEDD and collectively aimed to motivate others, foster team work, and create leadership roles that would benefit all stakeholders.

### Context

This multiple case study is based around one university campus offering a Bachelor of Education (BEd) for primary teaching. The campus is set in a low socio-economic community and the school-based experiences were seen as a way to build aspirations for university as well as providing school-based experiences for preservice teachers. Five units were selected in this study comprising of three units focused on preservice teachers' field experiences during the degree, in particular the additional school-based experiences leading up to each field experience, and extensions to two curriculum areas within the degree (Table 1). The curriculum areas included: Science in Schools and Studies of Society and its Environment (SOSE). The field experience lead-up days know as the "Ed Start" program, included second, third and fourth-year preservice teachers only, as there were no field experiences for first-year preservice teachers at this university. The research question for this study was: How does an increase in school-based experiences benefit preservice teacher education?

Table 1: *Demographics on units, participants, and additional school-based days*

BEd Unit	Number of participants	University year	Duration of school-based experiences
Field Experience I	26	2nd	Six days, one each week
Field Experience III	23	4th	Five days, one each week
Field Experience IV	12	4th	Three days, one each week
Science in Schools	38	2nd	Four 35-minute lessons in one day
SOSE	24	3rd	Three days, one each week

### Data collection methods and analysis

This mixed-method investigation involved an analysis of multiple case studies aligned with the TEDD project. This study investigated preservice teachers' school-based experiences across a selection of Bachelor of Education (BEd) units offered at a Queensland university campus. A five-part Likert scale survey (strongly disagree=1, strongly agree=5) and extended response questionnaires aimed to gather perceptions of the integrated school-based experiences. SPSS was used to generate descriptive statistics (i.e., percentages, mean scores [*M*], and standard deviations [*SD*]). "Means and variances for items scored on a continuum (such as a five-point Likert-type scale) are calculated simply the way other means and variances are calculated" (parenthesis included; Kline, 2005, p. 95).

Survey data provided information about the preservice teachers' perceptions of their school-based experiences through items on the Likert scale with an opening header: "During my school-based experiences in this unit, I felt I developed...". Literature-based survey items were clustered around five constructs (see Tables 2-6); both survey items and associated categories (i.e., personal-professional skill development, system requirements, teaching practices, student behaviour, and feedback to students and reflect) may be noted in the tables (Appendix). For instance, one construct is "Student Behaviour" and included items such as: During my school-based experiences

in this unit, I felt I developed effective classroom management; and During my school-based experiences in this unit, I felt I developed a positive emotional climate in the classroom. A questionnaire was administered to preservice teachers after the school-based experiences leading up to the practicum and two extended BEd subject areas (i.e., Science in Schools and SOSE). The questionnaire required written responses to understand their self-reported professional learning during this period. Examples of some questions are as follows:

1. What was your most important learning experience during the school-based experience?
2. How would you improve upon your teaching in the school-based experience?
3. What specific skills did you develop as a result of this the school-based experience?

Responses were collated around these questions and specific responses were selected that may be considered representative of the cohort (Hittleman & Simon, 2006). Data sources were triangulated to provide insight into these preservice teachers' experiences.

## **Results and discussion**

### *Field Experiences*

The three professional experiences undertaken by preservice teachers during the TEDD project were structured to be at their zones of proximal development (e.g., see Vygotsky, 1978). Tables 2-6 (Appendix) outline participants' agree and strongly agree responses to the survey questions linked to five categories, namely: personal-professional skill development, system requirements, teaching practices, student behaviour, and feedback to students and reflection on practice. Preservice teachers from this campus claimed that these experiences were very suitable to their stages of development and indicated that the experiences assisted in developing their knowledge and skills towards becoming practitioners. The percentage range for first, third and fourth practicum was between 91-100% with a high mean score range (4.26-5.00). The low standard deviation range (0.00-0.86) indicated general agreement with these responses (Tables 2-6).

The first practicum cohort ( $n=26$ ) was scaffolded with preservice teacher-centred tasks where they entered the school one day per week over a six-week period leading up to their four-week block practicum. Each visit had associated tasks and learning was further scaffolded in follow-up tutorials held in the university setting. Qualitative responses through the questionnaire supported the quantitative data (Tables 2-6, Appendix) where they generally claimed the program to be "extremely beneficial" with "an opportunity to create professional relationships with the students before being chucked into everyday teaching". Analysing the lead-up one-day experiences, one participant claimed that "It was really great to have these days as it meant I was comfortable in the classroom and knew the students and teachers". Some preservice teachers went beyond knowing the teacher, students and classroom environment to specific consideration of "the teacher's behaviour and classroom management skills", which was indicated in Table 5. This further connects to the principles indicated by Korthagen et al. (2006), particularly Principle 6, where "Learning about teaching requires meaningful relationships between schools, universities and student teachers (p. 1034).

First, third and fourth practicum responses on the questionnaires were similar with positive affirmations of their school-based experiences leading up to their practicum. They agreed or strongly agreed with their development of personal-professional skills as a result of this

experience (i.e., rapport with students, communication with students, positive attitudes for teaching, confidence as a teacher, Table 2) and learning about teaching practices (see Table 4). In their written responses, all claimed they had learnt from the experience and many presented specific insights into their learning. There was general agreement with these three cohorts that the workload was reasonable and realistic, and most agreed that they did not require further support while in these environments. Teachers voluntarily elected to mentor these preservice teachers one day per week, as did the preservice teachers also voluntarily elect to be involved and committed to this extension program.

Preservice teachers ( $n=23$ ) in their third practicum articulated a diverse range of what they considered to be their highest achievements. Some focused on the student relationship and learning, which links to Table 2, (e.g., “Building a solid relationship through teaching and supporting students” and “Being able to teach students a unit concept and seeing them getting it”; see also Korthagen et al. 2006, Principle 6). Some concentrated on specific skills indicated in tables 4 and 6 (e.g., “Understanding the importance of assessment and backward mapping” and “Developing new management skills in terms of academic differentiation and behaviour management” [also Table 5]), while others recognised the value of reflection on practice, (e.g., “Becoming a reflective teacher [see also Table 6] and also finally gaining good understandings of student diversity”). The school-based experience allowed these preservice teachers to feel appreciated, such as “Having parents come up and thanked me for teaching their students” but most importantly there was recognition of praxis development, for example: “My experiences within the classroom, I felt that I had more knowledge and theory going into this prac and this was seen within my lessons”. This praxis was noted in developing very specific pedagogical knowledge such as “The theory of assessment for learning, how to use assessment effectively”.

Participants were asked how they could improve their teaching in the school-based experience leading to their third practicum. Although nearly half the responses provided no suggestion for improvement in the program, others were able to specify aspects that could be improved. For instance, they wanted more class time and more contact time with the teacher for planning and feedback purposes; although one said, “Have the mentors trained to teach us” and another wrote, “Teacher mentors should be encouraged to provide constructive, relevant feedback which is also timely”. In the skill development area, there were responses about learning how to understand the “diverse range of learning abilities through task differentiation”. This response indicated a focus on learning through a curriculum (see also Korthagen et al., 2006).

The fourth-year preservice teachers ( $n=12$ ) involved in the fourth practicum outlined specific skills as a result of their school-based experience. All focused on the development of behaviour management, planning, including hands-on activities, assessment strategies, and refining reflective practices. When asked how they could improve upon their teaching, these preservice teachers focused on skill development such as “use more ICT”, “Provide more hands-on learning experiences” and “Develop better skills at planning and time management”. They recognised that further experience will assist in strengthening these skills. The specific insights into their practices differentiated them from other cohorts in previous years at university. The additional school-based experiences leading into the practicum appeared beneficial for preservice teachers involved in

Field Experience I, III, and IV. Advantages included knowing the school environment, developing professional relationships with students and teachers, familiarity with the mentor teacher's approaches, classroom management (including behaviour management), and general classroom operating times.

### *Science in Schools*

The science in schools program was investigated with 38 second-year preservice teachers' school-based experiences for teaching science. Their responses were similar to field experiences I, III, and IV (percentage range: 81-100%; *M* range: 4.05-4.47; *SD* range: 0.47-0.73; Tables 2-6). Preservice teachers indicated agreement on all items associated with the categories (i.e., personal-professional skill development, system requirements, teaching practices, student behaviour, and feedback to students and reflection on practice). Qualitative data indicated that these preservice teachers considered their achievements as: "able to modify the intended lesson to accommodate prior learning and age" and "conducting an activity that none of the children had any knowledge on". There was a clear sense of accomplishment as a result of teaching these science lessons, creating "teachable moments – having the knowledge or skills to run with students' questions or ideas". Overall, these second-year preservice teachers had very positive experiences in learning how to teach science and as two wrote: "Really enjoyable...real-world students with mixed abilities...required constant critical self-reflection – very beneficial" and "let us go out into schools more often". Korthagen et al's (2006) Principle 5 explains how "Learning about teaching requires an emphasis on those learning to teach working closely with their peers" (p. 1032). This experience allowed pairs of preservice teachers to work together on connecting theory and practice, reflect on their practices, and then make informed judgements about improving the teaching and learning for the next repeated science activity.

Content knowledge can be an issue for preservice teachers, which was recognised by this cohort. As an illustration of this, one participant wanted to understand: "students' knowledge of chemical reactions and polymers" and another need an "understanding of density and how they [the students] can apply it in real life". This school-based experience allowed the preservice teachers to be prepared with their content knowledge. Indeed, seven participants commented about their content knowledge achievements for differentiated learning, for example: "providing scientific explanations to students of mixed abilities". There was also a sense of success for teaching science content as one stated, "teaching students a scientific concept they knew nothing about". Teachers must have content knowledge, however, in science education this content is constantly changing with new discoveries and scientific advancements hence, it is so broad that any specific scientific area has considerable depth. Nevertheless, effective teachers inform themselves with content knowledge before entering the classroom and, similarly, these preservice teachers prepared themselves to understand the content knowledge they were teaching. Overall, this school-based experience allowed these preservice teachers to reflect on practice and connect theory to practice as a way for professional growth (see Schön, 1983). Moreover, the cyclic processes that required them to plan, implement reflect, and re-plan appeared to aid this pedagogical development (see also Hudson, 2010).

## SOSE

The school-based experiences for the Studies of Society and its Environment (SOSE) unit lead into the third practicum. The survey used for the practicum responses was administered to third-year preservice teachers' ( $n=24$ ) involved in the SOSE unit. Their responses were significantly different from the field experiences I, III, and IV (percentage range: 10-86%;  $M$  range: 2.33-4.00;  $SD$  range: 0.55-1.32; Tables 2-6). Descriptive statistics for this cohort indicated that they generally did not agree or strongly agree this practicum developed their pedagogical knowledge and skills. This experience was intended to provide a specific focus on the SOSE subject area. These third-year students in their responses emphasised that the experience did not develop their confidence or positive attitudes for teaching (33%, 38% respectively, Table 2), and all items associated with *Teaching practices*, except hands-on lessons, were below 30% of agree and strongly agree responses (Table 4). Less than 50% also reported that they agreed or strongly agreed on all items associated with the category *Feedback to students and reflection on practice* (Table 6).

This third-year cohort presented different responses from other subject-specific school-based experiences in this study, and qualitatively rationalised their quantitative responses. This cohort had only three school-based days for SOSE and suggested, "More prac days than three would have been nice", and that the days occurred when "Swimming was on every Tuesday and the teacher during other times of the day had non-contact times, rarely saw her teach". A few outlined that these three days interfered with their university work, "Right in the middle of final assignment"; while many concurred that it was "a waste of time" for SOSE learning for reasons such as "[the teacher] was not a very good role model to watch for teaching SOSE", "Unfortunately my teacher wasn't enthusiastic at this time with her class" or "Didn't see a SOSE lesson". Many Queensland teachers vary their programs to teach science in one term and SOSE in the next term, therefore, teachers involved in this program may be teaching their science units rather than the SOSE unit. However, when a SOSE lesson was taught it was met with negative responses, for instance: "The SOSE lessons that were taught were not engaging and just worksheets. The only benefit I got out of going to these lessons was to see what not to do as students were not motivated or interested" and "From observations of the SOSE lesson structure it became very clear of what not to do. It was also obvious that the ability level of students was not on par with EL [Queensland syllabus]". Only one student had a positive SOSE experience in this cohort: "My experience was very good but a lot of others complained". Indeed, responses to all other questions were also negative with considerable input into how the school-based experienced could be improved. Despite the negativity with this experience, all wanted to continue the program and provided advice such as: "More days for variety (e.g. Mon, Wed as well) and more than three (e.g. ten days)", "earlier in the semester", "more preparation and communication with the teachers and schools", and "Timing! Not on swimming days". These responses indicated that further collaboration between the university and school was required to position the preservice teachers with purposeful pedagogical learning. Preservice teachers may have considered the lead-up days with a SOSE focus as unsuccessful, however, Korthagen et al. (2006) outline in their first principle that "Learning about teaching involves continuously conflicting and competing demands" (p. 1025). Implicitly, these preservice teachers may have an understanding of the conflicting demands within primary schools, but this would require additional data collection to determine how they interpreted these conflicting and competing demands.

## Conclusions

One of the aims of the TEDD project was to increase school-based experiences for preservice teachers. Overall, the evidence from preservice teachers' perceptions of their increased experience indicated that the extended school-based experiences were perceived to benefit their development. The lead-up days for field experiences were considered advantageous for preservice teacher development across the five categories (i.e., personal-professional skill development, system requirements, teaching practices, student behaviour, and feedback to students and reflect). Generally, preservice teachers considered any additional experience in learning to teach primary students as beneficial, including one full day with multiple lesson delivery (i.e., Science in Schools). However, greater university-school collaboration was required to ensure the SOSE focus could be covered in the school. Alternatively, the university requirement for preservice teachers undertaking this SOSE experience could be made broader to have opportunities for investigating SOSE in the school (e.g., working with small groups of students or investigating SOSE programs and resources). It is not advocated that the five aforementioned categories are fully representative of praxis development but rather provide a snapshot of attributes and practices assigned to the studies programs, and a way for preservice teachers to self report on their development in these areas.

Even though funding will be limited for teacher education, universities must actively support the process for praxis by linking programs to “the realities of teaching and learning rather than procedural skills” (Moore, 2003, p. 41). In this current study, there was considerable goodwill in these partnership arrangements that aimed at forming stronger university-school collaborations. In addition, various principles outlined in Korthagen et al's (2006) paper can be connected to the praxis development indicated in this study. Preservice teachers received more hands-on experiences where they were able to develop professional relationships with students and teachers, and were able to design, implement and evaluate their teaching in real-world settings. Implementing reform measures may require a re-adjustment of schedules and plans by scaffolding preservice teacher experiences with additional days. Yet, “benefits for all” can be noted in programs that have these additional arrangements, that is, the schools involved in this study indicated that their primary students benefitted from the preservice teacher interactions and teachers intoned they had learnt new ideas brought from the university to the classroom. Throughout this study there were only two comments out of 228 experiences that negated these arrangements, and both were connected to family and work commitments. Nevertheless, all other preservice teachers were in favour of these additional days, including those who did not have a favourable subject experience (e.g., SOSE), as they presented solutions to improve on these experiences for their future involvement. One of the criticisms in reviews and reports (e.g., (HRSCEVT, 2007) is articulated by preservice teachers, who clearly want more real-world experiences and recognise this as a way to improve their practices. University-school collaborations around additional school-based experiences as lead-up days for field experiences and as avenues for exploring the teaching of specific subject areas present as opportunities for preservice teachers to connect theory with practice.

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## Appendix

Table 2: *Personal-professional skill development*

Item	Field Experience I (n=26)			Field Experience III (n=23)			Field Experience IV (n=12)			SOSE (n=24)			Science (n=38)		
	%*	M	SD	%	M	SD	%	M	SD	%	M	SD	%	M	SD
Rapport with students	100	4.77	0.43	96	4.78	0.52	100	4.92	0.29	86	4.00	0.55	100	4.42	0.50
Communication with students	100	4.85	0.37	100	4.52	0.51	100	4.92	0.29	86	3.95	0.67	100	4.42	0.50
Positive attitudes for teaching	96	4.65	0.69	100	4.70	0.47	100	4.92	0.29	38	3.00	1.10	100	4.47	0.51
Confidence as a teacher	100	4.81	0.40	96	4.52	0.73	100	4.92	0.29	33	2.81	1.25	100	4.39	0.50

\* Percentage of participants who agreed or strongly agreed.

Table 3: *System requirements*

Item	Field Experience I (n=26)			Field Experience III (n=23)			Field Experience IV (n=12)			SOSE (n=24)			Science (n=38)		
	%*	M	SD	%	M	SD	%	M	SD	%	M	SD	%	M	SD
Link theory to practice	100	4.69	0.47	No data			No data			52	3.29	1.19	100	4.34	0.48
Knowledge of syllabus	92	4.19	0.69	83	4.09	0.67	100	4.67	0.49	29	2.67	1.07	81	4.05	0.66
Aims for teaching	100	4.65	0.49	100	4.48	0.51	100	4.75	0.45	24	2.62	1.07	100	4.32	0.47

Table 4: *Teaching practices*

Item	Field Experience I (n=26)			Field Experience III (n=23)			Field Experience IV (n=12)			SOSE (n=24)			Science (n=38)		
	%*	M	SD	%	M	SD	%	M	SD	%	M	SD	%	M	SD
Hands-on lessons	100	4.65	0.49	100	4.35	0.49	100	4.92	0.29	57	3.14	1.32	100	4.45	0.50
Content knowledge	96	4.50	0.58	No data			100	4.83	0.39	29	2.71	1.15	97	4.42	0.55
Lesson preparation	100	4.69	0.47	91	4.57	0.79	100	4.83	0.39	29	2.67	1.28	97	4.42	0.55
Lesson structure	100	4.65	0.49	96	4.43	0.59	100	4.83	0.39	24	2.48	1.21	100	4.39	0.50
Implementation of lesson	100	4.62	0.50	100	4.57	0.51	100	5.00	0.00	24	2.38	1.07	89	4.26	0.64
Lesson plans for teaching	100	4.62	0.50	100	4.43	0.51	100	4.83	0.39	19	2.67	1.07	97	4.45	0.55
Questioning skills	100	4.65	0.49	100	4.48	0.51	100	4.75	0.45	19	2.57	0.98	100	4.50	0.51
Syllabus language	92	4.31	0.74	91	4.26	0.62	100	4.83	0.39	19	2.57	1.12	81	4.18	0.73
Strategies for assessing students	96	4.54	0.58	96	4.48	0.59	100	4.92	0.29	19	2.52	1.08	89	4.16	0.59
Strategies for solving problems	No data			100	4.35	0.49	100	4.92	0.29	14	2.38	0.92	No data		

Table 5: *Student behaviour*

Item	Field Experience I (n=26)			Field Experience III (n=23)			Field Experience IV (n=12)			SOSE (n=24)			Science (n=38)		
	%*	M	SD	%	M	SD	%	M	SD	%	M	SD	%	M	SD
Effective classroom management	96	4.69	0.55	87	4.48	0.73	100	4.83	0.39	72	3.52	1.03	100	4.37	0.49
Positive emotional climate in the classroom	100	4.62	0.50	91	4.43	0.66	100	4.92	0.29	71	3.62	0.92	97	4.37	0.54
Motivate students	92	4.50	0.65	No data			100	4.92	0.29	48	3.00	1.23	100	4.42	0.50

Table 6: *Feedback to students and reflection on practice*

Item	Field Experience I (n=26)			Field Experience III (n=23)			Field Experience IV (n=12)			SOSE (n=24)			Science (n=38)		
	%*	M	SD	%	M	SD	%	M	SD	%	M	SD	%	M	SD
Provide oral feedback to students	96	4.46	0.86	100	4.39	0.50	100	4.83	0.39	48	3.24	1.00	94	4.32	0.57
Provide written feedback to students	100	4.42	0.50	96	4.43	0.59	92	4.50	0.67	10	2.33	0.86	89	4.16	0.68
Evaluate teaching practices	100	4.62	0.50	96	4.39	0.58	100	4.67	0.49	43	3.19	1.08	97	4.41	0.50
Reflective practices for improving teaching	100	4.77	0.43	100	4.57	0.51	100	4.75	0.45	43	3.19	1.08	92	4.29	0.61
New viewpoints	100	4.73	0.45	83	4.23	0.74	100	4.75	0.45	24	2.62	1.02	No data		