# Assessing Students' Perceptions of the Effectiveness of Instructional Interventions with Post-Pre Surveys

Lannie Kanevsky, Ph.D. Faculty of Education and Institute for the Study of Teaching and Learning in the Disciplines Simon Fraser University July 2016 Additional advantages of the post-pre method include the time saved by collecting pre- and postintervention data in only one session rather than two. This also avoids problems with attrition. Unfortunately, both formats (post-pre and pre-post) are vulnerable to concerns associated with all self-report measures such as self-assessment biases like "social desirability," i.e., providing a socially appropriate response rather than an accurate one.

#### Designing a Post-Pre Survey

The process of developing a post-pre survey begins with clearly specifying the intended outcomes of an intervention (e.g., the goals, objectives, capacities). Hiebert and Magnussen (2014) recommend survey items be developed to assess three types of change related to each learning outcome:

- Competence: changes in knowledge (what students know) and skill (what students can do).
- Personal attributes: changes in (a) attitudes, beliefs or dispositions (e.g., attitude toward subject, belief that change is possible); (b) intrapersonal factors (e.g., confidence, motivation, self-esteem; and (c) independence (e.g., self-reliance, initiative, independent use of knowledge and skills provided) (based on Baudoin et al., 2007).
- Future impacts: benefits or changes in students' lives,

The final item on both sample surveys is essential. It asks students to indicate the extent to which they feel differences between their pre- and post- ratings are due to the instruction they received or to other influences in their lives. An item like this must be included in your survey. Its d

are to complete it or to give significant consideration in to their responses. That said, students tend to enjoy responding to post-pre surveys because the items enable them to see evidence of their growth that they might not have appreciated without completing it.

#### 3. How many respondents are needed?

Any data are better than no data so no matter how small your class, your data can address questions you have about the effects of your instruction and thus be meaningful and helpful to you. The larger the sample, the more likely it is to be representative of future cohorts of students. It's important to think carefully about how to optimize the response rate. Surveys distributed and completed in class have higher response rates than

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## Appendix B

Capacity	Type of change			0	1	2	3	4	0	1	2	3	4
	Competence	1.	I had/have a clear understanding of the nature and role of inquiry in my practice.										
	Competence	2.	I had/have a clear understanding of nature and role of critical reflection in my practice.										
	Personal attribute	3.	I was/am commited to reflecting on and thinking critically about my practice.										
	Personal attribute	4.	I questioned/question and tried/try to determine the effe4 0 0 0.1464750 4856366cr										

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Competence	I had/have a clear understanding of theories 15. of leadership and the characteristics of leaders.	
Personal attribute	<ol> <li>I had/have confidence in my ability to take on leadership roles in educational settings.</li> </ol>	
Personal attribute	<ul><li>I saw/see myself as a leader in educational</li><li>17. settings (my classroom or my school, or beyond).</li></ul>	
Future impact	18. I sought/will seek and embrace leadership opportunties in my school, district or beyond.	
Competence	19. I had/have a clear understanding of the ethic of care.	
Personal attribute	20. An ethic of care guided/guides my practice.	
Personal attribute	<ul> <li>I was/am able to initiate and manage my</li> <li>21. professional learning and growthlearning and growth related to my practice.</li> </ul>	
Future impact	<ul> <li>I thrived/thrive amidst the opportunities and</li> <li>challenges brought about by new tools and</li> <li>ways of thinking in a changing educational context.</li> </ul>	

23.

Overall Program Impact

To what extent would you say that any changes in the ratings you gave yourself above for before the

24.

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## Appendix C

### **Types of Change**

Based on Hiebert, B. & Magnusson, K. (2014), p. 529-530

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## Appendix D Students' Perceptions of Their Growth in the "Teaching and Learning in Today's Classrooms" Pilot Program Offered in a Blended Format

June 2016

#### The Program

For more than 20 years, Simon Fraser University's Field Programs offered by the Faculty of Education have supported the professional growth of educators through innovative learning experiences for teachers. More than 3700 teachers have completed its popular two-year Graduate Diplomas in Education (GDE) since they were first offered in 2000 in a face-to-face format.

A key to the success of those programs has been the development of rich, collaborative learning communities among the students. These communities support the growth of members' professional capacities. In 2011, a Blended Program Development Committee was established to determine whether experiences could be created that would enable the pedagogy and community characteristic of face-to-face programs to be established and thrive if the program was offered via a combination of online and face-to-face experiences -- and achieve the same outcomes or better. Our hope was to make GDE programs accessible and attractive to teachers who lived in remote areas by requiring them to come to campus once a year for Summer Institutes;

Pre- and post- means for each item are provided in Table 1 (the summary table on the next page). They provide further evidence of the impact of the program on these students including the following:

- The percentage of "Excellent" ratings rose from 8.8% at the start of the program to 66.5% after, and "Not OK" ratings dropped from 23.3% to 0.4%.
- All but 0.4% of the 33.3% of ratings that were "Not OK" at the beginning of the program improved to OK by the end.
- The percentage of "OK" ratings rose from 66.6% before the program, to 99.6% by the end.

Paired sample *t*-tests were run to determine whether the differences between the mean rating for each

