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## THIS IS MY STORY: AN EARLY CAREER PROFESSOR'S EXPERIENCE USING A FEEDFORWARD TEACHING METHOD

BRENTON BUTTON *Faculty of Education, University of Winnipeg*

**ABSTRACT.** This Note from the Field is a reflection on the author's first attempt at using a combined feedforward and agile teaching approach. Typically, professors receive student feedback at the end of a term through course evaluations. These evaluations can be powerful professional development tools, but the students who gave the feedback rarely benefit from their suggestions. Using a feedforward and agile approach may help professors integrate feedback during the semester and potentially increase student performance and/or engagement

CECI EST MON HISTOIRE : L'EXPÉRIENCE D'UN PROFESSEUR EN DÉBUT DE CARRIÈRE UTILISANT UNE MÉTHODE D'ENSEIGNEMENT FEEDFORWARD ET AGILE

**RÉSUMÉ.** Ce note du terrain est une réflexion sur la première tentative de l'auteur d'utiliser une approche d'enseignement combinant le feedforward et l'agilité. En général, les professeurs obtiennent les commentaires des élèves à la fin d'un semestre par l'entremise des évaluations de cours. Ces dernières constituent des outils très puissants pour le développement professionnel des apprenants, mais ceux-ci n'en tirent pas vraiment profit. L'utilisation d'une approche feedforward et agile peut aider les professeurs à intégrer les commentaires tout au long du semestre, ce qui pourrait favoriser une meilleure performance ou un engagement plus élevé chez les étudiants.

Over the last fifty years there has been growth in the field called scholarship of teaching and learning (Felten et al., 2007; Tight, 2018). One of the goals of this field is to improve student learning using scholarly inquiry and reflection by examining your own teaching (Tight, 2018). A potential way to achieve this goal is through course evaluations (Looney, 2018). These course evaluations can provide feedback on a range of areas, such as student perceptions of the best features of the course, as well as of the teaching—and notably, how to make improvements. Many concerns have been expressed with these evaluations;

easier classes often get better scores (Boehmer & Wood, 2017), evaluations reflect both a racial or gender bias (Mengel et al., 2019; Reid, 2010)) and, the focus of this Note from the Field, teachers are not able to implement the findings (Surgenor, 2013). Students who submit feedback through end-of-term course evaluations do not benefit from any of the suggested course changes, if implemented; the following year's students may have their own unique needs that may not be met if those changes are made (Cathcart et al., 2014). One way to address this concern is using a *feedforward* approach like the one presented by Glassey et al. (2018), such that feedback generated during the term can be used by the teacher to achieve a desired outcome. This enables changes in the course or its teaching to improve student mastery of a given topic or, as if the focus here, course delivery (López-Alcarria et al., 2019).

Using a feedforward approach to improve teaching in higher education can be challenging. A teacher may have to modify lecture material, attempt a different teaching style, or alter learning materials in a short amount of time. The agile teaching method represents a response to these challenges. The *agile method* started as a way to bring software to the market faster (Misra et al., 2012). To achieve this goal, Beedle et al. (2001) created *The Agile Manifesto*. The manifesto was guided by four values: 1) individuals and interactions over processes and tools, 2) working software over comprehensive documentation, 3) customer collaboration over contract negotiation, and 4) responding to change over following a plan. Some of these values can be applied to education; specifically, the 1) prioritizing individuals and interactions over processes and tools, 2) an emphasis on working material rather than providing comprehensive textbook-like documentation, 3) striving for collaboration (over contract negotiation), and 4) responding to change rather than strictly adhering to a plan (Beedle et al., 2001). Krehbiel et al. (2017) further explored the agile manifesto as it related to teaching where the authors added the value of continuous improvement. Most recently, Nissim and Simon (2020) used the agile methodology to address the transitions teachers and schools had to make during the COVID-19 pandemic. Using a feedforward system can tell a teacher what to change, while the agile method can draw on responsiveness and continuous improvement as a way to support students.

In this Note from the Field, I document my personal experience in executing a feedforward strategy in my first year of full-time university teaching. The hope is that teachers and colleagues can learn from, and build on, my findings to improve responsiveness to teaching.

## PERSONAL CONTEXT

I recently took my first academic job at a small university in a large Canadian city. During my first year, I had a reduced teaching load: I taught one class in the first semester and two classes in the second semester. Courses were all 4<sup>th</sup>

or 5<sup>th</sup> year undergraduate courses, ranging in size from 15-30 students, and were all online due to the COVID-19 pandemic. For each course, I was given the previous year's syllabus and the freedom to change any aspects of the course, as long as it met the stated objectives in the course outline. Although this was my first academic appointment, I brought over 11 years of teaching experience at various levels, ranging from kindergarten to university. I have also conducted some research on feedback. This combined practical and theoretical background enhanced my understanding of different strategies related to teaching and learning.

## MY APPROACH

For the courses I taught in my first year at the university, I decided to use a combination of whole group sessions (i.e., lectures), small group breakouts where each group would discuss different problems or situations related to the day's lecture material, and student-led sessions (i.e., student presentations on both topics of their choice and assigned topics, and seminars). To implement a feedforward system in my teaching, I used a simple Qualtrics form that said, "stuff my teacher should know" in an ode to Schwartz' book (2016), *I wish my teacher knew: How one question can change everything for our kids and students*. I instructed students to use this form of communication if they wanted to tell me something about my teaching, the course content, concerns about upcoming topics, or any other concerns about which the student wanted to remain anonymous. I posted a link to this form at the beginning of lecture and gave reminders throughout the course.

During the first semester, only one student used the form toward the end of the term to voice their displeasure with the difficulty of one assignment. Their comment was valid, but it was in partial opposition to the purpose of the assignment. This is a common criticism of teacher evaluations – instructors who grade easily and have easier courses will typically receive better teaching evaluations (Boehmer & Wood, 2017). This one comment had me reflecting on the tensions between student perceptions and teaching perceptions on the teaching and learning experience. In the second semester, I had a similar experience where students voiced their displeasure about a particular learning task. The assignment had similar characteristics to the project from the first semester. However, in the second semester, the students felt comfortable engaging with me in dialogue about their concerns. I discussed the importance of the learning task in relation to the class and their future careers. Students seemed to understand and agree with the importance of the assignment. I felt better that those students were comfortable giving me feedback, and we were able to have a conversation about aspects of the course. In the future, I will take more time explaining the importance of topics and learning tasks in the course, but, more importantly, I will continue to use a relational approach to teaching

as I think engaging students in a feedback conversation provides a deeper learning experience for both myself and my students (Telio et al., 2015). Finding a way to combine a conversational aspect and a blinded approach through an online program might allow for students to stay anonymous while still being able to engage in a feedback conversation.

In the second semester, I received significantly more comments, but also experienced significantly more stress. The comments included student concerns around not having the necessary depth of understanding on certain topics, requests for changes to presentation materials, feedback on marked assignments, and other more personal notes. I found the comments to be mostly helpful, but to implement the agile teaching method and respond to change (rather than adhere to the plan I had set out) was stressful. Nevertheless, I reviewed and reflected on all the comments. If I felt like I could implement the change and it would lead to an improvement in course delivery, I created new slides, prepared lecture material, re-thought the small group sessions or changed how assessment and evaluation feedback was presented. For example, I had originally planned on only doing an overview of different models used in the field. However, upon checking the online form, I found that one student wanted a greater depth of information, leading me to believe other students might share the same concern. I decided to re-structure the next lecture to achieve the required depth. Trying to be immediately responsive often led to anxiety about checking the online feedback submission site. I became worried that I might not be able to make changes, and it was especially difficult receiving negative feedback ( Cathcart et al., 2014; Lavigne, 2014; Yao & Grady, 2005). I have wondered if my efforts were actually improving the learning experience for my students or not, and have considered adding a survey about the feedback approach.

Teaching and life-long learning go hand in hand. Like many attempts to implement a new teaching method, my first experience with the feedback approach was far from perfect, leaving me with many unanswered questions. Does adapting course material and delivery on short notice carry more cost than benefit? As I continue to teach these classes, I will become more confident with students' previous knowledge and build a larger material database, which will make responding much easier. I aim to continue to implement some sort of student feedback loop through all my courses, as I feel it is important in teaching to listen to students' voices so as to meet each class's specific needs. By sharing my experiences in using this feedback method, my hope is to inform and motivate others to try this practice—this so as to counter the limitations of end-of-semester evaluations, once the experience of a course is over.

## REFERENCES

- Beedle, M., van Bennekum, A., Cockburn, A., Cunningham, W., Fowler, M., Highsmith, J., Hunt, A., Jeffries, R., Kern, J., Marick, B., Martin, R., Schwaber, K., Sutherland, J., & Thomas, D. (2001). *Manifesto for Agile Software Development*. <https://agilemanifesto.org/>
- Boehmer, D. M., & Wood, W. C. (2017). Student vs. faculty perspectives on quality instruction: Gender bias, “hotness,” and “easiness” in evaluating teaching. *Journal of Education for Business*, 92(4), 173–178. <https://doi.org/10.1080/08832323.2017.1313189>
- Cathcart, A., Greer, D., & Neale, L. (2014). Learner-focused evaluation cycles: Facilitating learning using feedforward, concurrent and feedback evaluation. *Assessment and Evaluation in Higher Education*, 39(7), 790–802. <https://doi.org/10.1080/02602938.2013.870969>
- Felten, P., Kalish, A., Pingree, A., & Plank, K. M. (2007). 6: Toward a Scholarship of Teaching and Learning in Educational Development. *To Improve the Academy*, 25, 93–108.
- Glassey, R., Wiggberg, M., Haller, & P. Agile. (2018, September 3-6). *Adaptive learning via the eck-model in the software development academy*. In Proceedings of the EC-TEL 2018: 13th European Conference for Technology-Enhanced Learning, Leeds, UK, 3–6 September 2018.
- Krehbiel, T., Salzarulo, P., Cosmah, M., Forren, J., Gannod, G., Havelka, D., Hulshult, A., & Merhout, J. (2017). Agile manifesto for teaching and learning. *The Journal of Effective Teaching*, 17(2), 90–111.
- Lavigne, A. L. (2014). Exploring the intended and unintended consequences of high-stakes teacher evaluation on schools, teachers, and students. *Teachers College Record*, 116(1), 1–29. <https://doi.org/10.1177/016146811411600103>
- Looney, J. (2018). High-Quality Teachers: teacher evaluation for improvement. *European Journal of Education*, 46(4), 440–455.
- López-Alcarria, A., Olivares-Vicente, A., & Poza-Vilches, F. (2019). A systematic review of the use of Agile methodologies in education to foster sustainability competencies. *Sustainability*, 11(10), 1–29. <https://doi.org/10.3390/su11102915>
- Mengel, F., Sauermann, J., & Zölitz, U. (2019). Gender bias in teaching evaluations. *Journal of the European Economic Association*, 17(2), 535–566. <https://doi.org/10.1093/jeea/jvx057>
- Misra, S., Kumar, V., Kumar, U., Fantasy, K., & Akhter, M. (2012). Agile software development practices: Evolution, principles, and criticisms. *International Journal of Quality & Reliability Management*, 29(9), 972–980. <https://doi.org/10.1108/02656711211272863>
- Nissim, Y., & Simon, E. (2020). Agility in teacher training: Distance learning during the Covid-19 pandemic. *International Education Studies*, 13(12), 11–26.
- Reid, L. D. (2010). The role of perceived race and gender in the evaluation of college teaching on RateMyProfessors.com. *Journal of Diversity in Higher Education*, 3(3), 137–152. <https://doi.org/10.1037/a0019865>
- Schwartz, K. (2016). *I wish my teacher knew: How one question can change everything for our kids*. Da Capo Lifelong Books.
- Surgenor, P. W. G. (2013). Obstacles and opportunities: Addressing the growing pains of summative student evaluation of teaching. *Assessment and Evaluation in Higher Education*, 38(3), 363–376. <https://doi.org/10.1080/02602938.2011.635247>
- Telio, S., Ajjawi, R., & Regehr, G. (2015). The “educational alliance” as a framework for reconceptualizing feedback in medical education. *Academic Medicine*, 90(5), 609–614. <https://doi.org/10.1097/ACM.0000000000000560>
- Tight, M. (2018). Tracking the scholarship of teaching and learning. *Policy Reviews in Higher Education*, 2(1), 61–78. <https://doi.org/10.1080/23322969.2017.1390690>

Yao, Y., & Grady, M. L. (2005). How do faculty make formative use of student evaluation feedback?: A multiple case study. *Journal of Personnel Evaluation in Education*, 18(2), 107–126. <https://doi.org/10.1007/s11092-006-9000-9>

BRENTON BUTTON was an elementary and high school teacher in Ontario, Canada, before joining the Faculty of Education at the University of Winnipeg as an assistant professor. His research focuses on higher education, children's health, rural health, and pre-service teaching. [b.button@uwinnipeg.ca](mailto:b.button@uwinnipeg.ca)

BRENTON BUTTON était enseignant dans les écoles primaires et secondaires en Ontario, au Canada, avant de rejoindre la Faculté d'éducation de l'Université de Winnipeg en tant que professeur adjoint. Ses recherches portent sur l'enseignement supérieur, la santé des enfants, la santé rurale et la formation des enseignants en formation initiale/préservice. [b.button@uwinnipeg.ca](mailto:b.button@uwinnipeg.ca)