CAUTIOUSLY IMPLEMENTING TEAM TEACHING: A REFLECTION ON A PILOT TEAM TEACHING COURSE

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BACKGROUND

The practice of collaborative teaching is increasing in universities, especially in interdisciplinary programmes. While collaborative research is encouraged (and at times the norm), collaborative teaching is not as prevalent. Where collaborative teaching is practiced, the nature and extent of collaboration differs. Hence, when moving away from the traditional lecture format where course content is imparted by a single lecturer, there is a need to understand the institutional implications of adopting alternative teaching models such as co-teaching or team teaching. This article is based on our experiences and reflections in adopting these alternative teaching models to teach eight modules in the Lee Kuan Yew School of Public Policy’s (LKY SPP) Master of Public Policy Programme over two academic years. It compares team-taught and co-taught modules in the programme which are related to interdisciplinary topics¹.

What is team teaching?

Based on our experience, we conceptualize co-teaching as a teaching model where instructors share the module’s teaching load, either equally or as per mutual understanding, but do not actively engage in each other’s class or address the class together. In contrast, we define team teaching as an active collaboration between instructors, starting from the module design stage to the delivery of the material in the classroom.
CONTEXT

Our definition draws upon our experience at LKY SPP, where core modules of the Master of Public Policy Programme have moved away from being single faculty-taught to team-taught modules by two to three faculty. The assumption is that team teaching may foster deeper learning compared to single-taught courses (Anderson & Speck, 1998; Carpenter et al., 2007; Crow & Smith, 2003).

Rationales for team teaching

The impetus for implementing team teaching at the LKY SPP stems from various rationales that reinforce each other:

1. To facilitate the integration of junior faculty with little teaching experience
2. To capitalize on complementary expertise between faculty within a similar area of expertise
3. To enable students to understand public policy from various schools of thought, such as an economic, political and institutional perspective, which is necessary in some inter-disciplinary courses

With respect to the first rationale, as discussed later, there is a need to exercise caution such that no faculty within the team would ‘overshadow’ another, but instead work on an equal footing where all members of the team would learn from each other. Regarding the second rationale, student evaluations have shown that because of the complementary expertise different faculty bring to the team, team-taught courses provide students with the opportunity to be exposed to diverse points of view. Finally, for the last rationale, team teaching would enable students to look at complex public policy problems from different disciplinary perspectives, understand the pros and the cons of analytical tools, or build argumentation by utilizing different data sources and information.

IMPLEMENTING TEAM TEACHING

These team-taught core modules occur in the first year of the two-year programme, and constitute about 25 percent of the total number of modules. The total enrolment for the programme is about 60, comprising mainly international students. After two years of implementing team-taught modules, a new team of instructors would be put together for each module, to facilitate continuous innovation and experimentation.

Intended learning outcomes

The main learning outcomes of these core modules are to enable students to adopt an integrative approach to public policy analysis through various disciplinary approaches such as economics, politics, and development studies. Our team teaching approach implies that instructors work as a team to design the learning objectives of the module, planning all assignments, and assessing students’ work as integral components of team teaching. Holding post-class debrief meetings is also crucial to team teaching, ensuring continuous interaction and dialogue between instructors.
Implicitly, the adoption of a team-taught approach assumes that the learning outcomes of students in team-taught classes are reached more significantly than those taught by a single instructor. However, in order to test this proposition, a comparison group would be required. The available evidence from the literature tends to focus on the advantages and disadvantages contrasting between common collaborative teaching models (Dynak, Whitten & Dynak, 1997), as summarized in Table 1. In the context of the LKY SPP, a combination of complementary, parallel and co-teaching approaches are used.

Table 1  
**Collaborative teaching models: Features, advantages, and disadvantages**

<table>
<thead>
<tr>
<th>Collaborative Teaching Models</th>
<th>Features</th>
<th>Advantages</th>
<th>Disadvantages</th>
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<tbody>
<tr>
<td>Alternative</td>
<td>Re-teaching or extension of the lesson by a supporting instructor beyond the classroom. This is common in courses that require laboratory sessions or computer-aided instruction, such as learning software associated with the course.</td>
<td>This model can be adopted for ‘hard skills’ or technical courses to enable smaller groups to interact with an instructor. It is a common model when the main instructor works with a team of teaching assistants.</td>
<td>Variability in teaching quality between joint instructors may lead to students opting to attend sessions conducted by the more experienced instructors, resulting in larger classes than initially intended. When class sizes are restricted (e.g. due to the number of computers available) close monitoring of students is necessary.</td>
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<tr>
<td>Complementary</td>
<td>When a supporting instructor in the classroom assists students during or after the lesson. A typical application of this model is when the lead instructor is involved in teaching the core concepts and gives in-class assignments. Meanwhile, the supporting instructor walks around in class to help students apply the concepts to the assignments.</td>
<td>This can be done any time the class involves small group discussions, where several instructors can informally join groups and call on each other to answer specific questions. Students might have a better appreciation of differing views. Also enable instructors to have a better understanding of the areas that need further reinforcement in subsequent classes.</td>
<td>The teaching team needs to ensure that students are aware that different instructors co-teaching the module may give different advice, especially in the context of assignments, where there are many ways to solve a particular problem. Students need to have a certain degree of openness and maturity to be able to function well in this context.</td>
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<tr>
<td>Parallel</td>
<td>When the class is split into smaller groups to reduce the student-instructor ratio and facilitate closer student-instructor interaction.</td>
<td>This allows for the use of more than one case study or ‘problem’, where students may choose which topic interests them the most, or is most relevant to their professional objectives.</td>
<td>Disadvantages are similar to the “Alternative” model, and may be further amplified in the context of ‘soft skills’ teaching, where the ability and experience of instructors in imparting such knowledge may be more variable.</td>
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Co-teaching  
When the instructors share the teaching load based on their areas of knowledge. There may or may not be joint module planning and design. Usually the instructors would run their assigned sessions independently without the other instructor(s) being present in class.

Less time consuming for instructors in terms of coordination and grading. Administratively, this is a useful model when instructors have travel or other professional obligations, e.g. co-teaching can be on alternate weeks, alternate months, or simply by dividing the semester in two parts.

Students may perceive a lack of integration in the syllabus. Attention must be paid on the sequencing of instructors, so it fosters an appropriate learning journey, building on the scaffolding done earlier. There is potential for faculty to underestimate the need for coordination.

Source: Dynak, Whitten, and Dynak (1997)

Evaluating the impact of team teaching

Experimental studies would be ideal to measure the impact of team teaching. However, it would require careful logistical planning as well as significant resource allocation. In programmes where total enrolment numbers are small, such as this graduate level programme offered by the LKY SPP, splitting the cohort for an experimental evaluation might be impossible. Measuring the impact would require tracking the students for a reasonably long period of time so that a change in learning outcomes is actually observed. Semester-long courses might not be conducive for these reasons, and year-long courses are not a norm in most departments. Further, with several departments emphasizing student diversity, identifying well-balanced treatment and control groups can be challenging, and this would have direct implications for the validity of results from the experimental evaluation.

LIMITATIONS OF TEAM TEACHING AND LEARNING POINTS

Ensure clarity and coherence of teaching approach and materials between faculty members

While there are definite advantages to team teaching, it is not without its disadvantages. For the students, team teaching could lead to more confusion than clarity on the material if the perspectives of instructors within the team are too conflicting (Buckley, 2000). It may also lead to confusion among students over who might be the “lead faculty” for the entire module and they may not know which instructor to approach or communicate with to clarify doubts outside the classroom. From the faculty standpoint, preparing for a team-taught module is certainly more challenging than preparing for single-taught modules. Specifically for our module, we spent a significant amount of time designing the syllabus, assignments, and exchanging feedback on lecture notes. This heavy investment in preparation time could be a concern especially to tenure track faculty, who must strike a balance between teaching and research.
Recognition of a different and preferred approach by the university administration

At the administrative level, we draw the following conclusions: Firstly, when opting for team teaching as an appropriate pedagogic method for a module, the administrators must be clear that this is preferred over a single taught module. Secondly, the team members’ composition must be carefully selected to ensure complementarity, and equity and fairness between group members. Thirdly, administrators should recognize the workload involved in team teaching, which requires acknowledgement, in terms of the overall teaching load. This may become problematic especially when faculty are involved in multiple team-taught courses, due to the time required for coordination purposes.

For faculty on tenure track, training for team teaching can add to the existing burden of balancing research and teaching. As a result of these experiences, at the LKY SPP, there is appropriate teaching load credit for team-taught courses. A point to consider for administrators would be whether to engineer team teaching or let teams form organically over time. At the LKY SPP, teams are assigned by the School’s management, and the rotational nature of teams at the LKY SPP after two years of teaching gives room for individual faculty to adapt and learn from each other, as well as strengthen the teams. Faculty who collaborate on research projects can also team up to teach, allowing them to bring in insights from their research into the classroom.

Provide training or mentorship for faculty members new to team teaching

In addition, just as new faculty usually takes part in training as they engage in teaching in their first years, some type of training should also be considered for team teaching. The content of such training should include a discussion on the various modes of team teaching and the value in mixing these models. The importance of forging good relations between members of the team is essential. As such, the training described above can partly serve as a ‘warm up’ for new teams.

Develop indicators to measure team teaching

Thompson-Whiteside (2013) raises questions about standardized evaluations of teaching and learning. As frameworks are being drawn to ensure quality of teaching and students’ learning, and in order to benchmark institutions, these tend to take a more quantitative stance, in order to obtain more ‘precise’ and comparable measures. This trend may pose challenges for collaborative teaching, which involves a more complex set of interactions, and is challenging to quantify using standard measures that apply more to single taught courses. This reinforces the need to develop specific measures to assess collaborative teaching, so that the indicators reflect the diversity of teaching models used, and calls for the use of qualitative measures that could be used within a comparative perspective.

Developing such indicators requires further research, contrasting systematically student feedback (both qualitative and quantitative) in single taught courses versus co-taught or team-taught courses within the same field, or through the use of a control group within an experimental design. Given the internationalization of higher education, the expansion of partnerships across countries (via double degrees and exchange programs), we believe that this will be an increasingly important area of higher education management and deserves further research.
CONCLUSION

In conclusion, the benefits of team teaching can go beyond learning outcomes for students, as they see the team work together, and interact with both faculty in class. Extensive interaction tends to work better for class size of less than 40 students. It is also crucial that the faculty communicates clear expectations and deliverables together.

After more than three years of implementation, there is now a recognition that team taught courses are equivalent to a full course teaching load and faculty gets credit accordingly. However, it is still unclear how standardized student evaluation forms reflect the team-based aspect of teaching. Team teaching can be enriching but also more challenging (and time-consuming) than co-teaching, where only one faculty is in the classroom at a given time. Finally, team teaching requires a cautious and reflective approach to teaching, and one that respects professional growth of all team members.

ENDNOTE

1. The Authors would like to thank CDTL for a teaching enhancement grant that allowed us to look into this issue of team teaching and reflect on our institutional practices. A lengthier version of this paper was presented at the Fifth Asian Conference on Education in Osaka, Japan, in 2013. We thank the participants as well as CDTL staff for their valuable comments.
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