Successful Instructors Possess and Use Transferrable Personal Characteristics:

Successful Faculty Create and Use Learning Outcomes:

Context for Faculty Perceptions of Teaching:

Successful Instructors Possess and Use Transferrable Personal Characteristics:

A Qualitative Study of Successful IMPACT Faculty

“We teach the way we were taught,” the instructor stated, while humbly claiming various mistakes made during 30 years as a college professor. A well-respected and popular colleague added, “How do we revise a class to help students be more successful when the DFW rate is like a dumpster fire?”

A fall 2016 audit of the IMPACT program data showed 234 Purdue faculty have participated in IMPACT, to transform 225 different courses. 73 of these faculty redesigned, or have pending redesigns, for an additional 113 courses. Participating in IMPACT may not guarantee success, and many faculty are successful instructors without having participated in IMPACT, but what do successful instructors have in common to make them successful? What challenges do they overcome and how? Through interviews with eleven IMPACT participants who successfully transformed a Purdue course, we sought to discover what these faculty members have in common. The key characteristic we found:

They all care enough to do their best; they all continue to try improving.

This briefing summarizes select components of the full report, highlighting successful instructors’ personal characteristics, how they create and use learning outcomes, key characteristics of their facilitation strategies, and what they perceived was most important about IMPACT. We begin by providing survey data of faculty engagement to provide context.

Context for Faculty Perceptions of Teaching:

We assumed much of the interviewees’ perceptions are based on first-hand experiences. Some perceptions of their teaching and their perceived role of faculty at Purdue may be college or department specific. It’s possible some perceptions are swayed by rumor. To obtain general faculty perspectives on teaching, we refer to the 2015 COACHE data. 75.2% of survey respondents were satisfied or highly satisfied with their time spent on teaching, which was higher than rate of faculty satisfied with time spent on research (63.8% satisfied), outreach (57.3%), service (50.2%), or administrative tasks (27.4%). When reviewing these rates, consider: What level of satisfaction do we expect within the Purdue context? What should be done institutionally, or individually, for dissatisfied faculty? How do faculty impact satisfaction of their peer colleagues?

Successful Instructors Possess and Use Transferrable Personal Characteristics:

A Murphy Award winner, and member of the Purdue Teaching Academy, reflected on their early teaching:

“What a terrible teacher I was when I first started. Oh my god, I was horrible, horrible! I think about my first couple of semesters, I didn’t know anything about preparing for class, how to put a syllabus together, beginning, middle and end of a lesson, nothing. I didn’t know anything.”

Each interviewee possesses knowledge, skills, and a core set of characteristics that contribute to their success or, in some cases, contribute to their on-going challenges. Regarding their knowledge, most interviewees questioned whether their knowledge alone was sufficient to become an effective college instructor. For example:

“Higher education [is] an interesting thing. You spend a lot of time becoming technically efficient in—or technically knowledgeable in—a small little sliver of life and somehow, the institution thinks that qualifies you to teach.”

The act of questioning oneself might imply some faculty lack teaching-efficacy, but their experiences with IMPACT led some interviewees to explain how they achieve outcomes while teaching a course.

| Teaching Efficacy: Successful instructors believe they are able to be effective instructors. |
| Reflection: Successful instructors use reflection to identify successes and weaknesses in their own skills, strategies used to facilitate learning, or course circumstances. Reflection contributes to perceived changes in their teaching or improvement in their students’ learning experiences. |
| Resilience: Often accompanying their reflectiveness, study participants expressed a variety of one-time problems, such as technology issues, failing activities, or lack of student engagement. Instructors must also deal with systemic issues such as large enrollment classes or poor classroom characteristics. Successful instructors recognize a problem and identify a reasonable solution, sometimes through iterations of change. Successful instructors persist through difficult situations and challenges. Some even dive head first into the challenge. |
| Respect: Successful instructors respect their students, and expect to be respected by students. Mutual respect enhances the context for learning. It’s possible instructors disrespect students. Most likely disrespect is not intentional, but disrespect has consequences when neither acknowledged nor addressed. In general, interviewees want to respect their students, but understood the challenges they took to transform their course created risk for students and themselves alike. To challenge students effectively, instructors must provide support to meet the challenge. |
| Humility: Interviewees balanced knowing they are successful with recognizing they could be more successful. While all interviewees were all perceived to be successful, “I can get better” was a consistent tone throughout their responses. |
| Obligation: Some interviewees felt obliged to provide a strong learning experience. For example, making themselves available to students, or adapting to different students’ needs. |
| Shared Ownership: Some interviewees explained their successes within the context of partnerships. While each interviewee claimed ownership over their course, use of partnerships extends interviewees’ perceived success beyond what each would achieve by themselves. They had partnerships with peer faculty, undergraduate teaching assistants, and graduate teaching assistants. Within some strategies used by interviewees, instructors developed students’ ownership over their own learning. |

Successful Faculty Create and Use Learning Outcomes:

While participating in IMPACT, faculty learn backwards design, which is an approach to curriculum development based on determining intended outcomes, then identifying how to facilitate and assess. Hence, interviewees understood various types of learning outcomes—such as knowledge versus skill outcomes—and designed their course based on:

Planning to Achieve Course Outcomes: Interviewees described various ways to use outcomes during course planning. All interviewees now create and use written course-level outcomes, and all course content is traceable back to at least one course-level outcome. During planning, outcome revision typically appeared as writing and rewriting, or changing when an outcome might be addressed within the chronology of course activities. Some interviewees actively revised how they achieved outcomes while teaching a course.

| Table 1: Percent of Faculty Satisfied or Highly Satisfied within the Context of the Teaching COACHE 2015 |
| % Sat | n |
| Equitability of distribution of teaching load | 41.9% | 799 |
| Recognition: For teaching | 47.3% | 765 |
| Support for improving teaching | 50.4% | 787 |
| Resources and Support: Classrooms | 55.3% | 812 |
| Quality of students taught | 58.0% | 808 |
| Teaching effectiveness of tenured faculty | 60.5% | 731 |
| Quality of grad students to support teaching | 63.6% | 686 |
| Teaching effectiveness of pre-tenure faculty | 68.9% | 716 |
| Number of students in classes taught | 72.8% | 806 |
| Level of courses taught | 85.8% | 810 |
| Discretion over course content | 89.2% | 808 |
A Qualitative Study of Successful IMPACT Faculty

- **Communicating Outcomes to Students:** Interviewees communicate outcomes and expectations to students orally and in writing, and to begin the course and throughout the academic period. One interviewee questioned the effectiveness of sharing course-level outcomes on the first day of class, choosing instead to model the type of engagement they expect from students. Some interviewees provide written outcomes for each class period, and then use these outcomes to promote informal self-assessment by the student.

- **Using Outcomes:** Interviewees select and facilitate activities based on which activities best achieve an outcome, or achieve a series of outcomes. They might have their full course designed before an academic period, but are willing to make change plans based on what they perceive during activities or through their assessment of outcomes.

- **Assessing Outcomes:** Many instructors use assignments, projects, quizzes, and/or exams to assess learning, and the interviewees collectively used these same methods; however, they typically use these methods in atypical or alternative formats. For example, they may use pre-/post-assessment to evaluate outcomes based on students’ change(s) in knowledge, and stack assessments to demonstrate higher order learning commonly categorized within Bloom’s Taxonomy. Students’ performance demonstrated through assessments also helps some interviewees evaluate their facilitation strategies.

**Successful Faculty Facilitate Learning:**

- **Creating a Learning Environment:** First, the extent to which interviewees set expectations or establish learning outcomes creates the learning environment. Characteristics of a learning space affect interviewees’ intended use of the space and students’ experiences within the space, but these instructors learn what works within a space, based on the match between planned uses and actual outcomes, and adapt strategies to fit within the space.

- **Integrating Self-Testing:** Some interviewees create opportunities for students to self-test what they know. For example, through quizzes or classroom response tools. These experiences demonstrate to students what concepts they do not yet understand, and may impact how they study outside of class.

- **Engaging Students in Peer Partnerships or Teams:** All interviewees used some version of peer-to-peer engagement in class, such as impromptu peer partnerships, informal groups, or formal semester-long teams. They also either observe or interact with students during peer-to-peer activities, to continually assess students’ understanding and/or application of new knowledge.

- **Facilitating Within Cycles of Activities:** Some interviewees use consistent patterns of activities to help students assimilate to the course format. For example, an instructor might create a cycle of activities within a class period by beginning with a short lecture, then facilitate an iClicker/Hotseat question for students to test out and for the instructor to gauge students’ learning. An instructor might restructure if clarifications are needed, then transition to either individual or a peer activity. Similar cycles repeat within a class period as time allows. Other observed cycles appeared for each course topic, to connect the series of pre-class, in-class, and outside-of-class experiences.

- **Expecting Students to Apply What They Learn:** Interviewees build into the previously mentioned cycles of activities opportunities for students to apply what they learn. For example, students might practice solving problems on their own before sharing and comparing answers and solution strategies, or explaining their solution process. Application exercises are also built into assignments, exams, or other components of a course (e.g. lab).

- **Encouraging Constructive Behaviors:** Successful facilitation of learning requires setting expectations and identifying outcomes, but meeting these expectations requires instructors to manage students’ behaviors during course facilitation.

**Most Important Aspect of IMPACT:**

- **Successful instructors may lack recognition of their time and effort spent transforming a course.**

While not a study solely about their IMPACT experiences, we asked interviewees to identify the single most important aspect of their IMPACT experience. Overwhelmingly it was the fellow-to-fellow or facilitator-to-fellow contact. These contacts provided the means through which interviewees obtained the knowledge, skills, or experiences they personally sought through IMPACT, and may indicate a key outcome for any initiative designed to develop instructors’ skills or knowledge for teaching innovation. Other important aspects of the IMPACT program included:

- Interacting with peer instructors and program facilitators to share knowledge, obtain ideas, hear about successes or challenges.
- Interacting with others who are passionate about teaching.
- Freedom/flexibility to transform the course based on what the fellow thinks is best.
- Empowerment to be brave.
- Data about the students and student engagement.
- The value placed on teaching and learning.
- Facilitated experiences.
- The open space to talk about the IMPACT process.
- Understanding learning, creating learning outcomes, and mapping of outcomes.
- New ideas for teaching (e.g. use of technology, active learning, etc).

Some of these important aspects of IMPACT continue to matter to the interviewees, and they all continue to discuss teaching and learning with colleagues and/or support staff at Purdue.

**Conclusions and Recommendations:**

These successful faculty members believe in continuous course improvement. Other key findings of the study:

- There are many ways to be successful. We gained insight into what these successful instructors do to be successful, and found some strategies to explain how they do it.
- It takes extra time to be successful, including time to plan a course transformation, time to facilitate the course within an academic period, and time to maintain on-going course development.
- Successful instructors may lack recognition of their time and effort spent transforming a course.

We recommend campus partners collaborate to evaluate and record specific strategies instructors’ use that are most effective. These strategies may help targeted populations (e.g. new faculty) develop their teaching talents, or help other faculty adapt to targeted locations (e.g. Wilmeth Active Learning Center).

---

1For more information about IMPACT, see: [http://www.purdue.edu/impact/](http://www.purdue.edu/impact/)
2Available online at: [Perspectives of Successful IMPACT Faculty](http://www.purdue.edu/impact/)
3For more information about COACHE, refer to:
   - Purdue Office of the Provost: [http://www.purdue.edu/provost/faculty/facultinitiatives/coache.html](http://www.purdue.edu/provost/faculty/facultinitiatives/coache.html)