Turning the Knobs:  
A Coaching Pattern for XP through Agile Metrics

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Abstract. I want to turn the knobs to 10, but my job position doesn’t allow me to dictate that my team do so. Even if it did, forcing XP may serve only to cause resentment and backlash. Though I’ve been learning XP for over a year, it’s still new to the rest of our team, and we’re used to our old habits. By giving team members control of how extreme to be through a ‘teaching survey’, the team has started at a comfortable level of XP and has opened the door to future extremes. We’ve used the survey to define, coach, and track our XP process and have increased our use of XP by 10% in three months.

1 Our Approach: Light Metrics for an Agile Process

It didn’t seem appropriate to track a lightweight process with heavy metrics. An informal survey served as a good balance. (It’s listed in the appendix). The questions were worded with detailed examples to promote consistent meaning between different people’s numeric responses.

But a key purpose of the survey was not just to collect data, but also to teach XP. When we started, most people were unfamiliar with XP’s techniques. After reading the examples, they learned the practices and the reasons behind them. The humor in some of the examples kept people reading but also made them recall their own real life situations that may have been similar.

People already have habits. Some of the good habits looked like XP practices. The examples in the survey connect their subconscious habits with XP terms. By including successful (and unsuccessful!) habits in the examples, people became comfortable with the XP’s terminology. After the survey, people commented that they have done these in the past without having a name for it or seeing the connection between practices.

1.1 A Teaching Survey – A ‘Coaching Pattern’

The survey includes these elements:

1. Introduction text. It warns people that the 12 practices are interdependent and that the whole is greater than the sum of the parts. It tells people that o let people know that the practices are interdependent and the goal is for the team to define its process, not for me to force one.
2. A list of the twelve practices with one question per practice. There’s an additional one for XP in general.
3. Each question gives a concise description of a practice.
4. Both a ‘current’ and ‘desired’ level.
5. Scores with concrete (and perhaps humorous) examples.

The shocking thing about the survey is we’ve added a column for ‘desired level’ of XP. Normally you want the level to be ‘10’ because the practices feed off each other. We did this because I wanted to sell XP by letting the team get proficient at their comfort level first, and later striving for more extreme levels. I believe that a moderately high use of all the practices is better than none at all because it serves as a comfortable temporary step on the way to more extreme levels.

By giving people some control in the pace of our adoption of extreme practices, they feel more comfortable and feel less resistance. Instead of revolution, it’s rapid evolution.

The price for this approach is that we have to be careful to watch out for problem that may appear if some our enthusiasm for some practices is out of balance with others. Besides looking at practical metrics such as the number of automated unit test, the survey can help highlight areas that are falling behind as well.

As a coach I had to be prepared to listen if the team said ‘no’. I gambled that they would at least want to try XP, and that once the tried it they would be sold. So far it’s been a successful bet.

Whether it worked or not, as a secondary benefit, we would have a baseline description of the process we actually follow and could tune it from that starting point. Knowing what our process is and checking to see how well we follow it is a useful side benefit, especially if you need to consider the Capability Maturity Model. If we were to diverge from XP, I still wanted to follow a defined process, even if it was a custom process created by the team. Fortunately, this approach to introducing XP has been well received by our team, and we are on track to learn more about and focus on XP.

<table>
<thead>
<tr>
<th>Collective ownership</th>
<th>People can change each other’s code. We don’t have to wait for the specialist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current: ___</td>
<td>10 We regularly change code in any area. You can’t tell because our code looks the same.</td>
</tr>
<tr>
<td>Desired: ___</td>
<td>8 We regularly change code in any area</td>
</tr>
<tr>
<td></td>
<td>6 We’ve changed each other’s code, but usually assign stuff in specialty areas</td>
</tr>
<tr>
<td></td>
<td>4 We can fix it if we have to.</td>
</tr>
<tr>
<td></td>
<td>2 We’ll have to wait for them to get back from vacation</td>
</tr>
<tr>
<td></td>
<td>0 I lock all my files and keep ’em locked.</td>
</tr>
</tbody>
</table>

Fig. 1. Example Survey Question

2 Our Results

In three months, our average rating has increased from 6.0 to 7.0. Our goal has been set at a higher level, moving from 8.2 to 8.6. People’s increased appetite for XP is important because we are taking a risk by not being at an extreme level on every