

The Einstellung effect refers to a person's predisposition to solve a given problem in a specific manner even though "better" or more appropriate methods of solving the problem exist. The Einstellung effect is the negative effect of previous experience when solving new problems. ([http://en.wikipedia.org/wiki/Einstellung\\_effect](http://en.wikipedia.org/wiki/Einstellung_effect))

How is that related to this class? Sometimes we have people in the class who have studied traditional programming techniques and know how to solve certain types of logic problems. For example, suppose we want to find animals that are either cats or dogs. A traditional programming approach would be a test that looked like: `an_type = 'cat' or an_type = 'dog'` and that kind of logic also works in SQL. But suppose we want animals that were cats, dogs, birds, turtles, ferrets, guinea pigs, hamsters or hedgehogs. With traditional programming logic that would be

```
an_type = 'cat' or an_type = 'dog' or an_type = 'bird' or an_type = 'ferret'
or an_type = 'guinea pig' or an_type = 'hamster' or an_type = 'turtle' or
an_type = 'hedgehog'
```

With SQL we can use an In list

```
an_type IN ('cat', 'dog', 'bird', 'ferret', 'guinea pig', 'hamster', 'turtle',
'hedgehog')
```

The IN list is easier to write, easier to read, easier to maintain and it avoids a potential problem with the precedence of the logical operators. ( Which one would you prefer to write on an exam?)

So why do people write that long set of Or tests? Often because that is what they have already learned and it sticks in their brain. One of the purposes of this class is to shake up your brain a bit and get you to try new techniques. So some assignments require you to use certain techniques and avoid other techniques. Once you have some experience with the In list, you may find that you actually do prefer it to a long set of ORs. As the assignments go on you will have more flexibility in the exact techniques you use- but always pay attention in assignments to required techniques.