Developing MUMIE – module
additional entries in the Moodle-core for event-handlers

For keeping a third-party-software's database consistent to Moodle's we need to get to know about certain events. Since the event-handler-calls needed are not implemented yet, we had to put them into the core-code by ourselves to go on testing and implementing.
We inserted the following:

1. For user updated:
   1. by an admin:
      we inserted \texttt{events\_trigger('user\_updated', \$usernew)};
in moodle/user/editadvanced.php (near line 103)
   2. by himself:
      - we inserted \texttt{events\_trigger('user\_updated', \$usernew)};
in moodle/user/edit.php (near line 115)
      - we inserted \texttt{$eventdata = new object();}
          \texttt{$eventdata->user = \$USER;}
          \texttt{$eventdata->newpassword = \$data->newpassword1;}
          \texttt{events\_trigger('password\_changed', $eventdata);}
in moodle/login/change\_password.php (near line 71) for updating a password

2. For user deleted:
   we did not insert anything yet

3. For course updated:
   we inserted \texttt{events\_trigger('course\_updated', $data)};
in moodle/course/edit.php (near line 109)

4. For course deleted:
   we inserted \texttt{events\_trigger('course\_deleted', $course)};
in moodle/course/delete.php (near line 73)

5. For category updated:
   we inserted \texttt{events\_trigger('category\_updated', $category)};
in moodle/course/category.php (near line 61)

6. For category deleted:
   we inserted \texttt{events\_trigger('category\_deleted', $deletecat)};
in moodle/course/index.php (near line 151)

7. For group created:
   we inserted \texttt{events\_trigger('group\_created', $data)};
in moodle/group/edit.php (near line 112)

8. For group updated:
   we inserted \texttt{events\_trigger('group\_updated', $data)};
in moodle/group/edit.php (near line 127)

9. For group deleted:
   we inserted \texttt{events\_trigger('group\_deleted', $id)};
in moodle/group/edit.php (near line 86)

10. For a user added to a group:
     we first inserted \texttt{$eventdata = new object();}
          \texttt{$eventdata->groupid = $groupid;}
          \texttt{$eventdata->userid = $userid;}
          \texttt{events\_trigger('group\_user\_added', $eventdata);}
in moodle/group/assign.php (near line 55)
     BUT because of the possibility of self-enrolments, we suggest to better insert this into moodle/group/lib/basicgrouplib.php in function \texttt{groups\_add\_member($groupid, $userid)}
11. For a user removed from a group:

```php
$eventdata = new object();
$eventdata->groupid = $groupid;
$eventdata->userid = $userid;
events_trigger('group_user_removed', $eventdata);
```

in moodle/group/assign.php (near line 72)

With all this in the core-code our module works fine and we really hope to have this calls in the 1.9 release, too.