

# **Workshop on Metrics for ADA**

Location: Vienna University of Economics and Business Administration, Austria Time: March 10th 2020, 14-16h

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|                      | Work Package and<br>Outcome ref.nr | 5   | .2.                           |  |
|----------------------|------------------------------------|---|-------------------------------|--|
|                      | Title                              | Metrics for ADA   |                               |  |
|                      |                                    | Teaching material   | Event                         |  |
|                      | Туре                               | Learning material   | ⊠ Report                      |  |
|                      | ☐ Training material                | ☑ Training material   | Service/Product               |  |
|                      |                                    | Within this task the goal is to   | define metrics for master     |  |
|                      |                                    | study program of advanced d   | ata analytics in business     |  |
|                      |                                    |   |                               |  |
|                      |                                    | experiences of the successful   | study programs in the area of |  |
|                      |                                    | Description<br>study program of advanced data analytics in business<br>according to report on the survey of the practices and<br>experiences of the successful study programs in the area of<br>business analytics, data science, big data courses and LLL<br>courses in the EHEA countries. Workshop will be organized<br>to introduce the institutions organizing study program and<br>LLL courses to set quality metrics.<br>The following tasks will be a part of this activity:<br>1. defining metrics for operation of the master | ce, big data courses and LLL  |  |
| Expected             |                                    |   |                               |  |
| Deliverable/Results/ |                                    |   |                               |  |
| Outcomes             |                                    |   |                               |  |
|                      | Description                        |   | -                             |  |
|                      |                                    | •   | peration of the master        |  |
|                      |                                    | program,  |                               |  |
|                      |                                    | 2. defining metrics for cooperation with companies,   |                               |  |
|                      |                                    | 3. defining metrics for L   |                               |  |
|                      |                                    | 4. defining metrics for t   | -                             |  |
|                      |                                    | 5. defining metrics for le  |                               |  |
|                      |                                    | -   | mployability of students      |  |
|                      |                                    | 7. workshop on quality  | metrics.                      |  |
|                      | Due date                           | 31-01   | -2020                         |  |



#### Metrics for of the degree of completion of Accreditation process

|   | Indicator   | How indicator will be measured                    | Who is responsible for<br>measurement and<br>reporting | When to measure                           |
|---|---|---|--|---|
| 1 | Number of accredited ADA study programs                                     | Decisions of NEAQA                                | UNS, UB, UNI   | At the end of<br>accreditation<br>process |
| 2 | Difference between planned<br>and actually accredited ADA<br>study programs | ADA project proposal<br>and<br>Decisions of NEAQA | QCC and PC   | At the end of<br>accreditation<br>process |
| 3 | Number of accredited modules within study program                           | Decisions of NEAQA                                | UNS, UB, UNI   | At the end of<br>accreditation<br>process |
| 4 | Number of accredited courses  | Decisions of NEAQA                                | Each Serbian HEI<br>partner                            | At the end of accreditation pr.           |
| 5 | Number of accredited (confirmed, verified) lecturers                        | Decisions of NEAQA                                | Each Serbian HEI<br>partner                            | At the end of accreditation pr.           |
| 6 |   |   |  |   |



|   | Metrics for training of teachers   |   |  |   |  |
|---|--|---|--|---|--|
|   | Indicator  | How indicator will be measured              | Who is responsible for<br>measurement and<br>reporting | When to measure                                 |  |
| 1 | Number of organized trainings<br>for teachers                                  | Event reports                               | WP2 Leader   | After every<br>training visit to<br>EU partners |  |
| 2 | Number of teachers trained during study visits abroad                          | Individual travel reports;<br>Event reports | Each Serbian HEI partner                               | After every<br>training visit to<br>EU partners |  |
| 3 | Number of courses covered by<br>teachers trained during study<br>visits abroad | Individual travel reports;<br>Event reports | Each Serbian HEI partner                               | After every<br>training visit to<br>EU partners |  |
| 4 |  |   |  |   |  |



#### Metrics for the student enrollment

|   | Indicator   | How indicator will be measured | Who is responsible for<br>measurement and<br>reporting | When to measure  |
|---|---|--------------------------------|--|--|
| 1 | Number of published<br>enrollment calls per year<br>(Number of Serbian HEI partner<br>who published enrollment calls<br>per year) | Enrollment calls               | WP3 Leader   | After the<br>enrollment period<br>for master studies<br>(in November<br>each year) |
| 2 | Number of open positions for students (per institution)   | Enrollment calls               | UNS, UB, UNI   | After the<br>enrollment period<br>for master studies<br>(in November<br>each year) |
| 3 | Number of candidates applied<br>(per institution)   | Enrollment documents           | UNS, UB, UNI   | After the<br>enrollment period<br>for master studies<br>(in November<br>each year) |



## Metrics for the student enrollment (2)

|   | Indicator  | How indicator will be measured | Who is responsible for<br>measurement and<br>reporting | When to measure  |
|---|--|--------------------------------|--|--|
| 4 | Number of candidates applied<br>from Serbia (per institution)                      | Enrollment documents           | UNS, UB, UNI   | After the<br>enrollment period<br>for master studies<br>(in November<br>each year) |
| 5 | Number of candidates applied from abroad (per institution)                         | Enrollment documents           | UNS, UB, UNI   | After the<br>enrollment period<br>for master studies<br>(in November<br>each year) |
| 6 | Number of candidates who<br>don't meet enrolment<br>requirements (per institution) | Enrollment documents           | UNS, UB, UNI   | After the<br>enrollment period<br>for master studies<br>(in November e.y.)         |



|   | Metrics for the student enrollment (3)                       |                                |  |   |  |
|---|--|--------------------------------|--|---|--|
|   | Indicator  | How indicator will be measured | Who is responsible for<br>measurement and<br>reporting | When to measure   |  |
| 7 | Number of enrolled students<br>(per institution)             | Enrollment documents           | UNS, UB, UNI   | After the enrollment<br>period for master<br>studies (in November<br>each year) |  |
| 8 | Number of enrolled students<br>from Serbia (per institution) | Enrollment documents           | UNS, UB, UNI   | After the enrollment<br>period for master<br>studies (in November<br>each year) |  |
| 9 | Number of enrolled students from abroad (per institution)    | Enrollment documents           | UNS, UB, UNI   | After the enrollment<br>period for master<br>studies (in November<br>each year) |  |
|   |  |                                |  |   |  |



## Metrics for operation of the master program

|   | Indicator  | How indicator will be measured | Who is responsible for<br>measurement and<br>reporting | When to measure             |
|---|--|--------------------------------|--|-----------------------------|
| 1 | Number of students per study program (per institution) | Student records                | UNS, UB, UNI   | At the end of each semester |
| 2 | Number of students per<br>module<br>(per institution)  | Student records                | UNS, UB, UNI   | At the end of each semester |
| 3 | Number of students per course<br>(per institution)     | Student records                | Each Serbian HEI<br>partner                            | At the end of each semester |
| 4 |  |                                |  |                             |



## Metrics for learning analytics

|   | Indicator  | How indicator will be measured | Who is responsible for<br>measurement and<br>reporting | When to measure                  |
|---|--|--------------------------------|--|----------------------------------|
| 1 | Number and % of students who successfully passed the course          | Student records                | Each Serbian HEI<br>partner                            | Cumulative, after each exam term |
| 2 | Success rate per module (% of<br>students who passed all<br>courses) | Student records                | UNS, UB, UNI   | At the end of school year        |
| 3 | Success rate per course (% of<br>students who passed the<br>course)  | Student records                | Each Serbian HEI<br>partner                            | At the end of school year        |
| 4 | Average grade per course   | Student records                | Each Serbian HEI<br>partner                            | At the end of school year        |
| 5 | Total number of submitted master thesis applications                 | Student records                | UNS, UB, UNI   | At the end of school year        |



## Metrics for learning analytics (2)

|        | Indicator  | How indicator will be measured | Who is responsible for<br>measurement and<br>reporting | When to measure           |
|--------|--|--------------------------------|--|---------------------------|
| 6      | Number of submitted master thesis applications per course            | Student records                | UNS, UB, UNI   | At the end of school year |
| 7      | Total number and % of<br>approved master thesis<br>applications      | Student records                | UNS, UB, UNI   | At the end of school year |
| 8      | Number and % of approved<br>master thesis applications per<br>course | Student records                | UNS, UB, UNI   | At the end of school year |
| 9      | Total number and % of<br>completed master thesis                     | Student records                | UNS, UB, UNI   | At the end of school year |
| 1<br>0 | Number and % of completed<br>master thesis per course                | Student records                | UNS, UB, UNI   | At the end of school year |



## Metrics for learning analytics (3)

|        | Indicator  | How indicator will be measured | Who is responsible for<br>measurement and<br>reporting | When to measure                               |
|--------|--|--------------------------------|--|---|
| 1<br>1 | Number of students who left<br>studies – dropout rate (per<br>institution) | Student records                | UNS, UB, UNI   | Cumulative, at<br>the end of each<br>semester |
| 1<br>2 | Average duration of studies  | Student records                | UNS, UB, UNI   | At the end of school year                     |
| 1<br>3 |  |                                |  |   |
|        |  |                                |  |   |
|        |  |                                |  |   |



Metrics for cooperation with companies and student internships

|   | Indicator  | How indicator will be measured           | Who is responsible for<br>measurement and<br>reporting | When to measure           |
|---|--|--|--|---------------------------|
| 1 | Number of companies contacted for cooperation              | Communication records                    | UNS, UB, UNI   | At the end of school year |
| 2 | Number of companies agreed<br>to cooperate                 | Communication records                    | UNS, UB, UNI   | At the end of school year |
| 3 | Success rate of cooperation invitation                     | Communication records                    | UNS, UB, UNI   | At the end of school year |
| 4 | Number of granted internships                              | Communication records, signed agreements | UNS, UB, UNI   | At the end of school year |
| 5 | Number of students applied for internship (per internship) | Application records                      | UNS, UB, UNI   | At the end of school year |



Metrics for cooperation with companies and student internships (2)

|        | Indicator   | How indicator will be measured             | Who is responsible for<br>measurement and<br>reporting | When to measure           |
|--------|---|--|--|---------------------------|
| 6      | Number and % of students granted an internship                      | Application records, internship agreements | UNS, UB, UNI   | At the end of school year |
| 7      | Number and % of students started an internship                      | Internship reports                         | UNS, UB, UNI   | At the end of school year |
| 8      | Number and % of students<br>successfully completed an<br>internship | Internship reports                         | UNS, UB, UNI   | At the end of school year |
| 9      | Average duration of internships                                     | Internship reports                         | UNS, UB, UNI   | At the end of school year |
| 1<br>0 |   |  |  |                           |



## **Metrics for LLL courses**

|   | Indicator   | How indicator will be measured | Who is responsible for<br>measurement and<br>reporting | When to measure                                 |
|---|---|--------------------------------|--|---|
| 1 | Number of LLL courses   | LLL course list                | WP3 Leader   | When LLL course<br>list is approved by<br>SC    |
| 2 | Number of LLL courses per institution                             | LLL course list                | Each Serbian HEI partner                               | When LLL course<br>list is approved by<br>SC    |
| 3 | Number of candidates applied<br>for LLL course (per course)       | Application records            | Each Serbian HEI partner                               | After application<br>process for LLL<br>courses |
| 4 | Number and % of candidates<br>attended LLL course (per<br>course) | Application records            | Each Serbian HEI partner                               | After application<br>process for LLL<br>courses |
| 5 | Success rate (% of attendees<br>who finished LLL course)          | Event reports                  | Each Serbian HEI partner                               | After finish of LLL<br>courses                  |













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#### **Metrics for satisfaction of students**

|   | Indicator  | How indicator will be measured                           | Who is responsible for<br>measurement and<br>reporting | When to measure            |
|---|--|--|--|----------------------------|
| 1 | Satisfaction with premises (space, equipment)                              | Student feedback form<br>(Satisfaction<br>questionnaire) | Each Serbian HEI<br>partner                            | At the end of the semester |
| 2 | Satisfaction with course description (objectives, structure, requirements) | Student feedback form<br>(Satisfaction questionnaire)    | Each Serbian HEI<br>partner                            | At the end of the semester |
| 3 | Satisfaction with clarity of<br>presentation                               | Student feedback form (Satisfaction questionnaire)       | Each Serbian HEI<br>partner                            | At the end of the semester |
| 4 | Satisfaction with teaching<br>materials                                    | Student feedback form (Satisfaction questionnaire)       | Each Serbian HEI<br>partner                            | At the end of the semester |
| 5 | Satisfaction with communication with lecturer                              | Student feedback form (Satisfaction questionnaire)       | Each Serbian HEI<br>partner                            | At the end of the semester |
| 6 | Satisfaction with gained knowledge   | Student feedback form (Satisfaction questionnaire)       | Each Serbian HEI<br>partner                            | At the end of the semester |



#### **Metrics for satisfaction of LLL course attendees**

|   | Indicator  | How indicator will be measured                              | Who is responsible for<br>measurement and<br>reporting | When to measure             |
|---|--|---|--|-----------------------------|
| 1 | Satisfaction with premises (space, equipment)                              | LLL course feedback<br>from (Satisfaction<br>questionnaire) | Each Serbian HEI<br>partner                            | At the end of LLL course    |
| 2 | Satisfaction with course description (objectives, structure, requirements) | LLL course feedback from (Satisfaction questionnaire)       | Each Serbian HEI<br>partner                            | At the end of LLL course    |
| 3 | Satisfaction with clarity of<br>presentation                               | LLL course feedback from (Satisfaction questionnaire)       | Each Serbian HEI<br>partner                            | At the end of LLL course    |
| 4 | Satisfaction with teaching materials                                       | LLL course feedback from (Satisfaction questionnaire)       | Each Serbian HEI<br>partner                            | At the end of LLL course    |
| 5 | Satisfaction with communication with lecturer                              | LLL course feedback from (Satisfaction questionnaire)       | Each Serbian HEI<br>partner                            | At the end of LLL course    |
| 6 | Satisfaction with gained knowledge   | LLL course feedback from (Satisfaction questionnaire)       | Each Serbian HEI<br>partner                            | At the end of LLL<br>course |



| Metrics for employability of students |   |                                |  |                           |
|---------------------------------------|---|--------------------------------|--|---------------------------|
|                                       | Indicator   | How indicator will be measured | Who is responsible for<br>measurement and<br>reporting | When to measure           |
| 1                                     | Number and % of students<br>employed 6 months after<br>graduation | Communication records          | Each Serbian HEI partner                               | 6 months after graduation |
| 2                                     | Number and % of students<br>employed a year after<br>graduation   | Communication records          | Each Serbian HEI partner                               | A year after graduation   |
| 3                                     |   |                                |  |                           |



## Thank you for your attention!