**Assessment Types, Strategies, and Feedback in Online Courses in Higher Education: Perspectives of Instructional Designers in the age of Artificial Intelligence**

**Florence Martin, Stella Kim, Doris Bolliger, Jennifer DeLarm**

## Purpose and Research Questions

### Purpose: to examine instructional designer perceptions of effectiveness regarding learner assessments in online environments in higher education in the age of artificial intelligence.

### RQs:

### What types of assessments and assessment strategies are considered effective by instructional designers in online courses in higher education?

### What modality and frequency do instructional designers recommend using to provide student feedback?

### Are types of assessments and assessment strategies correlated with instructional designer characteristics?

### How does the integration of artificial intelligence (AI) influence the assessment types, strategies, and feedback in online courses?

|  |  |
| --- | --- |
| **Assessment type** | ***M/SD*** |
| Case study analysis | 4.11(0.76) |
| Electronic portfolios | 3.99 (0.90) |
| Design projects | 3.99 (0.94) |
| Asynchronous discussions | 2.97 (1.11) |
| Proctored exams | 2.97 (1.07) |
| Non-proctored exams | 2.72 (1.06) |

|  |  |
| --- | --- |
| **Assessment strategy** | ***M/SD*** |
| Grading rubrics/criteria | 4.13 (.79) |
| Multiple attempts/submission | 3.87 (.90) |
| Formative assessments | 3.83 (.78) |
| Open book/note assessments | 3.06 (.94) |
| Automated graded | 2.72 (.81) |
| Ungraded | 2.62 (1.08) |

**Feedback**

|  |  |
| --- | --- |
| Variable | *N* (%) |
| Modality for feedback |  |
| Text | 80 (77.7%) |
| Audio | 64 (62.1%) |
| Video | 61 (59.2%) |
| Other | 21 (24.1%) |
| Missing | 16 (15.5%) |

**AI Uses**

|  |  |
| --- | --- |
| **AI Uses** | Frequency |
| Using AI to create grading rubrics | 5 |
| Use of machine graded/automated graded quizzes and feedback | 3 |
| Providing guidelines on the use of AI | 2 |
| Virtual simulations (conversational AI avatars) | 2 |
| AI as part of the feedback process | 2 |
| Designing assignments to prepare students to use and interact with AI ethically | 1 |
| Providing AI generated feedback | 1 |
| Integrating AI to facilitating student thinking | 1 |
| Using AI to enhance writing skills | 1 |
| Providing frequent formative assessments | 1 |
| Providing AI attribution for work completed using it | 1 |
| Providing peer feedback vs. AI feedback | 1 |
| Students proving the validity of AI generation | 1 |
| Assessments to incorporate AI intentionally | 1 |
| AI to help with assessment ideas | 1 |
| Attributing AI-generated work/differentiating from own work | 1 |