# UDL in Higher Education

## The Learning Brain

| Affective networks:The **WHY** of Learning | Recognition networks: The **WHAT** of Learning | Strategic networks: The **HOW** of Learning |
| --- | --- | --- |
| Affective network of the brain highlighted | Recognition network of the brain highlighted | Strategic network of the brain highlighted |
| How learners get engaged and stay motivated. How they are challenged, excited, or interested. These are affective dimensions. | How we gather facts and categorize what we see, hear, and read. Identifying letters, words, or an author's style are recognition tasks. | Planning and performing tasks. How we organize and express our ideas. Writing an essay or solving a math problem are strategic tasks. |
| **Multiple means of engagement in learning** | **Multiple means of representing information** | **Multiple means of action & expression of knowledge** |

## Strategies

Provide options for…

|  |  |  |
| --- | --- | --- |
| Sustaining effort & persistence  | Comprehension  | Executive functions |
| Self-regulation | Language, mathematical expressions, & symbols | Expression & communication |
| Recruiting interest | Perception | Physical action |

## Options

| ****Multiple means of engagement**** | ****Multiple means of representation**** | ****Multiple means of action & expression**** |
| --- | --- | --- |
| Rubrics | Handouts of PPTs | Choice in assignments |
| Examples of assignments | Audio recordings of lectures; podcasts | Authentic assessments – application/projects |
| Giving choices | Videos | Take home final |
| Collaborative assignments/group work | Dynamic syllabus | Provide templates & checklists |
| Models & scaffolding | Manageable chunks of information/change every 20 minutes | Graphic organizers |
| Specialization | Posting student notes | Multimedia project |
| Simulations | Repetition | Multiple drafts |
| Using games & gamification | Summaries | Successive work |
| Reducing participant risk | Images & visual aids, including graphs | Choice of topics |
| Direct & immediate feedback | Optional review or extension/challenge sessions | Group presentations/projects |
| Periodic summaries | Online or face-to-face options | Choice in assignment weights |
| Knowledge checks | Digital text (text-to-speech; translation) | Varied assessment types |
| Practices tests & exercises | Multiple document formats | Knowledge checks |
| Reminders | Concept maps/graphic organizers | Open-book exams/quizzes |
| Real world examples & problems | Outlines or note-taking guides | Journaling/reflection |
| Dissecting from end to beginning | Use of contrasting color | Practice tests & exercises |
| Clear rationales & personal benefits | Clear & concise language | Examples/sample work |
| Variety of examples/samples | Animation | Self & peer evaluation |
| Help set goals for own learning (short- & long-term) | Illustrations & diagrams | Speech-to-text |
| Create predictable environment | Captions & transcripts | Teach use of a variety of media |
| Novel & spontaneous activities | Links to vocabulary | Create website |
| Relevant, authentic, purposeful tasks | Text-to-speech | Create cartoon |
| Create sharable products | Create visual maps | Consider technology |
| Project based learning | Highlight key patterns | Help set achievable goals |
| Polling/student response systems | Just-in-time supports | Model long-term goal setting process |
| Building models | Hyperlinked glossaries | Teach how to plan |
| Use of manipulatives | Background information | Help with personal awareness & metacognition |
| Vary & optimize challenge | Demonstration | Model visual learning techniques |
| Timely & specific feedback | Written descriptions | Teach notetaking & organization |
| Encourage virtual collaboration | Models | Allow for technology, e.g. Read&Write Gold |
| Built-in reflective practices | Reference materials | Rubrics |
| Include mindfulness strategies | Highlight relationships | Scaffolding |
| Use relevant examples | Opportunities to revisit content | Study guides |
| Allow choice & personalization | Websites | Modeling |
| Opportunities to assess learning | Articles | Practice opportunities |
| Help connect knowledge & experiences | Word clouds | Discussions |
| Share assignment goals/purposes | Infographics | Interviews |
| Detailed instructions | Alternative text/text alternatives | Brochures or advertisements |
| Have evaluate own work | Pre-teach vocabulary | Infographics |
| Incorporate reflection | Introductions | Customized feedback |
| Submissions of draft work | Guided questions | Partners |
| Peer reviews | Reading guides | Brainstorming |
| Encourage learning from mistakes | Clarify misconceptions | Hands-on activity |
| Pre- & post-assessment | Connect new ideas to prior knowledge | Constructive feedback |
| Muddiest point | Provide purpose | Digital collection/portfolio |
| Ask about learners, learning preferences, learning needs upfront | Self-checks | Timely feedback |
| Insert current events | Highlight themes |  |
| Introduce cognitive dissonance | Warm-up exercise |  |
| Chunk content with breaks | Crowdsourced notetaking |  |
| Developmental feedback | In-class lecture |  |
| Restate goals & directions | Recorded lecture |  |
| Make global observations, comments | Color coding |  |
| Educate about iteration | Allow for assistive technology |  |
| Constructive feedback |  |  |
| Require mid-semester meeting with instructor |  |  |
| Encourage self-efficacy |  |  |
| Options for additional learning |  |  |
| Offering rewards/choices of rewards |  |  |