How Do Learning Styles and Personality Types Affect Student Preferences in Online Courses?

Drs. Melissa Engleman, Karen Voytecki, Tara Jeffs and Alana Zambone, College of Education, East Carolina University

Results

Comparing learning styles and the personality preferences of faculty vs. students yielded dramatic differences. Faculty were mostly intuitive (N), feeling (F), judging (J). Students were mostly sensing (S), feeling (F), judging (J). In looking at the core types, faculty showed mostly NF preferences, while students were mostly the SJ type. In learning styles, students were primarily active, sensory, visual, sequential learners and faculty were mostly reflective, intuitive, visual, global learning types. The student types were further emphasized in the UDL unit and the survey parts of the study, where they reported a need for step-by-step instructions. They also referred to needing more concrete learning tasks and not knowing which choice to make in activities because they didn’t know which one the instructor wanted them to make (the choices were purely set up for their learning preferences and were of all equal value).

Discussion

Comparison of the faculty and student data showed that the two groups were almost opposite in both personality preference types and in learning style preferences. Students were mostly the sensing-judging (SJ) personality preference type. The SJ type likes clear, sequential steps, teacher-placing, and likes things to be “right.” They prefer a direct deal of structure, and prefer to have concrete explanations of why particular activities are important. Students were also mostly of the active, sensing, sequential type, which means they prefer conciseness, practicality and immediate feedback. They value caution and accuracy.

The faculty participants were mostly global learners, who were of the intuitive-feeling type (NF). The NF personality preference type, searches for meaning in tasks, sees the “big picture”, and likes things to be intriguing and fulfilling. They don’t need the structured, concrete explanations of activities, but prefer to impose their own meaning on learning experiences. They value harmony and self-determination.

Conclusions

Three things were abundantly clear from these results. First, one-size of instructional design does not fit all. Although there are many common elements in learners, they are all different. Second, instructors who primarily design online courses the way they like learning will fail to use preferred strategies for most of their audience. Third, while it is impossible to design any one set of activities that will address all learner preferences, providing simultaneous options for how to access learning, while keeping directions and expectations very clear and sequential will likely meet with success. The rest of this paper provides recommendations based on our findings and our explorations into alternative methods of instruction.

References


Materials and Methods

Students from an online graduate course on Differences in Human Learning participated. A result of participating in the study for many students was a better understanding of their own learning needs, and how important it can be to have your learning needs met. Participants were all teacher education students, who taught every area and age group. Four instruments were used in the study. (1) Participants took an online personality preference test at the Human metrics web site that yielded a Myers-Briggs-like 4-letter outcome. (For a complete history of the Myers-Briggs instrument and its various uses, see Lee & Lee, 2006). Students reported whether they were (a) Extroverts or Introverts; (b) Sensors or Intuitives; (c) Thinkers or Perceivers; and (d) Judgers or Perceivers.

Student participants also reported their results from the online Index of Learning Styles Questionnaire available from Solomon and Felder, which indicated learning preferences. Students reported whether their preferred learning style was active or reflective; sensory or intuitive; visual or verbal; and global or sequential. They could also show “no preference” in any of the areas. A third instrument was a researcher-designed survey about online courses, students’ experiences and preferences with online courses. It also collected basic demographic information on the population. Finally, students participated in a universally designed learning (UDL) unit where their preferences were given several choices of how to receive information, engage in learning and express what they had learned. The affective, strategic and recognition learning environments were specifically addressed in the activity choices. Students then answered several questions about the UDL unit concerning the number and variety of choices, their confidence level when learning according to their own needs and whether they would like to have choices all the time.

Faculty. Respondents were faculty in the College of Education who had taught graduate level, online courses (n=34). Three instruments were used in the faculty study. Faculty participants took and reported results from the same personality preference and learning style inventories given to the students. Then faculty responded to a set of questions on a researcher-designed survey about online teaching that was parallel to the one given to the students, but from the faculty point of view.