

**CASE STUDIES, STUDENT ASSESSMENT, AND ASHA'S NEW STANDARDS:
THE SAINT ROSE EXPERIENCE**

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Introduction

Programs in communication sciences and disorders are challenged to develop cohesive evaluation measures that contribute to the summative assessment of student performance and, even more importantly, contribute to the integration of academic and clinical education. In the Communication Disorders Department at The College of Saint Rose, case study-based comprehensive examinations were implemented in 1996. To make the examination more meaningful for graduate students, and give them responsibility for their own learning, a process was established that begins with an advance organizer graduate students receive at the beginning of their program of study, and culminates with the case study-based comprehensive examination. In between, faculty use a variety of strategies for infusing case studies throughout the students' program. The process is a highly collaborative one that involves all members of the department. It is believed that this process creates a bridge between the program's formative and summative assessment procedures and will ultimately contribute to students meeting ASHA's new standards (American Speech-Language Hearing Association, 2001).

The Process

The Saint Rose process begins by providing a comprehensive examination advance organizer to students entering the program. Throughout the program, students are regularly exposed to case study-based learning experiences in the clinic, in the classroom, and during integrative activities that cut across the clinic and classroom. At the end of their program, students take the case-study based comprehensive

examination. These aspects of the program's process will be described in the next several paragraphs.

The department's comprehensive examination advance organizer is given to our new students during a program meeting in the third week of each semester. It contains nine case examples, which cover all the major communication disorders and includes cases of both children and adults. Following the case examples are questions that focus on assessment and intervention. In the voice case example below, note that the case description includes bracketed information that would be selected by the faculty expert when a voice case is selected for inclusion in the comprehensive examination. By choosing the information in brackets, faculty can present a number of potential clinical scenarios to students, and the scenario changes each time a voice case is included in the examination. The advance organizer provides a means for students to think about clinical problems in voice during their voice disorders class, when they are working with voice cases, and in preparation for comprehensive examinations. The following is an example of a case similar to those presented in the comprehensive examination advance organizer.

A Case Example

[Mickey/Minnie] Mouse comes to your clinical setting. [He/She] is a [23/36/55/70] year old [entertainer/accountant/retired steamboat captain/wizard] diagnosed with [puberphonia/muscle tension dysphonia/vocal fold paralysis/bilateral vocal nodules/contact ulcers]. [Mickey/Minnie] [smokes/does not smoke] and reports [high vocal demands/moderate vocal demands and exposure to vocal irritants/moderate vocal demands and a lot of stress]. After experiencing "voice trouble" for [three weeks/six months/one year], [he/she] went to an ENT, who confirmed the medical diagnosis. Based on this client profile, respond to the following:

- a) Describe the procedures you would use to evaluate this individual's voice. Be sure to include questions you would ask, tasks you would perform, instruments

you might apply during the evaluation, as well as the expected vocal characteristics.

- b) Based on your understanding of this vocal pathology and information provided, what prognosis for improved voice would you give to [Mickey/Minnie] and why?
- c) Describe intervention methods you would use as part of therapy to improve this client's voice. Collectively, these techniques, procedures, or activities should reflect both vocal hygiene and direct modification of the speaker's voice.

In addition to using the advance organizer, there are opportunities for students to experience case study-based learning in the clinic and in the classroom. In our on-campus clinic, all students take part in structured case staffings. Student clinicians, faculty, and adjunct supervisors collaborate in the preparation, presentation, and discussion of cases in our center. In addition, opportunities to experience case study-based learning take place as our students are exposed to the program's Apprenticeship Model (Feeney & Lamparelli, 2001). The aspects of the model that are particularly relevant include opportunities for students and clinicians to "think out loud" about clinical problems and on-going attempts to help students become self-supervising clinicians. These concepts are actively incorporated into students' clinical supervision.

In the classroom, students do several structured case study assignments throughout their program of study. While faculty are free to integrate cases into their courses as they wish, there are a few common elements that help students take part in a more relevant clinical problem solving experience.

First, advance organizers and checklists are provided to help students prepare their cases. (See examples in Appendix A and B.) In addition, consultation with peers, professionals, and clients is part of many assignments. Finally, many assignments include student self-reflection and presentation. Occasionally, faculty have used clients as "team teachers." For example, a person who stutters teaches lectures on assessment and treatment in Charleen Bloom and Donna Cooperman's fluency course.

Under these circumstances, students get an opportunity to learn about the important personal, emotional aspects of a communication disorder.

Recently, the department faculty have exposed students to case study-based learning experiences during integrative activities, including Clinical Grand Rounds, a program that occurs one evening each semester. Faculty and students come together to collaborate on a clinical problem that focuses attention on a cutting edge issue, like literacy and oral motor approaches to therapy. Clients, families, and colleagues from related disciplines are invited to Clinical Grand Rounds, so students can experience a clinical problem from a holistic, family-centered perspective. The faculty have also tried to integrate aspects of the program that began in one course, and are now being applied across courses and in the clinic, like The Synergistic Approach to Fluency Therapy (Bloom & Cooperman 1999) and decision making materials by Mark Ylvisaker (2001).

Bloom and Cooperman's Synergistic Approach was developed for people who stutter. The approach focuses on individualized assessment and three related areas of intervention: speech-language, attitudes and feelings, and environment. The Synergistic Approach is applied in both fluency class and a required fluency practicum that students take in the graduate program. In addition, faculty and supervisors have attempted to incorporate this framework with other disorders. Ylvisaker's decision making materials are provided for students in the child language disorders syllabus, so they can prepare, organize, and evaluate their case study-based assignments. The department has begun to apply these materials in other classes and in the clinic. Next year, information like this will be included in our clinic manual. Using these resources, which originated in a single course, it is anticipated that the program faculty can help students develop a holistic, integrated vocabulary for discussing and understanding clinical problems. Appendix A and B include examples of Ylvisaker's (1999) advance organizers.

At the end of their program of study, students complete the case study-based comprehensive examination. For the examination, faculty select cases from the comprehensive examination advance organizer. Five cases are selected each semester, so students are exposed to communication problems across the life span. Students are expected to write on four out of the five cases. Faculty readers evaluate the students on content and organization, including the student's application of the program's clinical philosophy and the shared, integrated vocabulary mentioned earlier. Since 1996, the passing rate on the comprehensive examination has been consistently high each semester (93-100%). In addition, qualitative assessment of completed examinations suggests that, over time, students have improved their writing to include more specific, client-centered responses, and their attention to the program's clinical philosophy has increased. By the time Saint Rose students graduate with their Master's degree, they would have been exposed to case study-based learning experiences in a variety of contexts.

The Benefits

The Saint Rose process has several benefits for students and provides the program with a context to meet some of ASHA's new standards (American Speech-Language Hearing Association, 2001). First, the activities described above focus on clinical problem solving and apply a shared clinical vocabulary. Second, the process helps integrate the classroom and the clinic, facilitating the transfer of learning (Detterman & Sternberg, 1993). Third, the process facilitates collaboration among students and faculty. Finally, the process bridges the gap between formative and summative assessment. Programmatically, it appears that these case study-based educational activities will address at least four of ASHA's new standards:

- Standard V, which describes the need for programs to include structured formative and summative assessment activities,
- Standard III-D and III-E, which focus on our student's ability to analyze, synthesize, and evaluate information, and

- Standard IV-D, which says that our students need to have a very broad range of clinical experiences, that address the life span, cultural and linguistic diversity, and the wide variety of clinical populations within our discipline.

The Next Steps

Regular evaluation and modification, particularly when it involves an ever-changing discipline like speech-language pathology. In response to ASHA's new standard in speech-language pathology, the Communication Disorders Department at The College of Saint Rose is looking forward to some important "next steps." First, there is a need to enhance our formative assessment procedures at the graduate level by:

- Modifying the graduate admissions process to include: a) a more structured transcript review and b) a self-reflective writing sample during the applicants' group interview, and
- Developing a component of formative assessment that will be completed half-way through a student's program of study, to assess their progress.

Second, there will be a need to structure the graduate curriculum a bit by:

- Creating first-year core courses that will be followed by more flexible choices in year two (depending on student interests), and
- Modifying the choice and ratio of required and elective courses to help cover the broad range of knowledge and experience reflected in the new standards.

Third, the program is beginning to modify the case study-based comprehensive examination in order to create a more open, flexible advance organizer and provide increased opportunities for students to write about issues such as cultural diversity, family dynamics, and so forth. Finally, the faculty will need to continue to study the impact of the process, including:

- Evaluating the student's success on the comprehensive examination (quantitatively and qualitatively) and

- Request feedback from the students during exit interviews and as part of alumni and employer surveys.

While the program at Saint Rose is confident that it can ultimately meet the new ASHA standards in speech-language pathology, there exists a sense of collective anxiety that comes with change. Fortunately, speech-language pathology is a discipline that has experienced constant growth over the years, as well as the fairly regular adaptation of educational programs to accommodate the growth. Clearly, the evolution continues!

References

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- Feeney, J. J., & Lamparelli, K. (2001, November). Clinical apprenticeship in communication disorders: An approach to clinical supervision. 2001 ASHA Annual Convention, New Orleans, LA.
- Ylvisaker, M. S. (2001). Decisions to make about learning trails and general orientation to intervention. In CMD 524 syllabus, College of Saint Rose, Albany, NY.

APPENDIX A

The handouts on clinical decision making in Appendix A and B were copied with permission from Mark Ylvisaker (2001) and are part of the course syllabus for CMD 524 - Child Language: Infants, Preschoolers, and People with Developmental Disabilities, Communication Disorders Department, College of Saint Rose, Albany, New York.

Decisions to Make About Learning Trials

I. Massed Versus Distributed Learning Trials

Massed Learning Trials: intensive, repeated, back-to-back practice of a target behavior or skill

advantage: relatively quick learning;

disadvantages: problems with generalization and maintenance in many cases;

Distributed Learning Trials: practice trials are distributed among activities throughout the day:

advantage: potentially facilitate generalization and maintenance

disadvantage: may be inefficient in early stages of learning

Massed: associated loosely with traditional pull-out therapy

Distributed: associated loosely with push-in, "naturalistic" approaches

II. Discrete Versus Embedded Learning Trials

Discrete Learning Trials: The target skill is removed (for practice) from its place within integrated activities (e.g., practice specific grammatical forms or word meanings outside of the context of semantically and pragmatically meaningful communication)

advantages: Some children may require discrete trials to discriminate and attend to the learning target

disadvantages: By removing the language target from its meaningful context, one may inadvertently teach the wrong meaning; problems with generalization; boredom

Embedded Learning Trials: The practice is embedded within activities natural for the targeted behavior

advantages: potentially facilitate generalization and maintenance

disadvantages: child may fail to focus on learning target

Discrete: associated loosely with traditional behavioral approaches

Embedded: associated loosely with “naturalistic” language therapy activities

III. Contextualized Versus Decontextualized Learning Trials

Contextualized: learning trials in a context (place, activity, people, stimuli and reinforcers) natural for the learner

advantage: potentially facilitates generalization and maintenance; stimuli and reinforcers are more likely to be natural, thereby promoting generalization/maintenance

disadvantage: may be difficult to achieve an adequate number of learning trials; may be difficult to ensure that the learner is focused on the learning target

Decontextualized: learning trials offered in a training context without features of the natural environment

advantage: easier to ensure large numbers of learning trials; may be easier to ensure focus

disadvantage: may block generalization and maintenance

Decontextualized: associated loosely with traditional pull-out therapy

Contextualized: associated loosely with push-in, “naturalistic” approaches and inclusion

IV. Planned Versus Incidental Learning Trials

Planned: time, place, and activity for learning are planned by the teacher

advantage: easier to achieve an adequate number of efficient learning trials

disadvantage: if not natural, may interfere with generalization and maintenance

Incidental: teachers seize teachable moments when the opportunity to learn occurs naturally

advantage: may facilitate motivation and generalization/maintenance

disadvantage: may not provide for sufficient practice unless everyday people are included as teachers

Planned: can be associated with traditional behavioral approaches – or any other approach

Incidental: associated loosely with milieu therapy, inclusion, and indirect therapy

V. Deliberate Versus Involuntary Learning

Deliberate: the learner's goal is to learn or remember the information or acquire the skill (e.g., memorize)

advantage: quicker learning for those capable of memorizing

disadvantage: learning is less deep and therefore may not endure

Involuntary ("incidental"): the learner's goal is not to learn anything, but rather to complete the activity

advantage: promoted deeper processing (understanding) and therefore endures longer

disadvantage: may require creativity to design learning tasks

Deliberate: associated loosely with traditional training and pedagogical approaches

Involuntary: associated loosely with apprenticeship approaches

VI. Consequence-Oriented Versus Antecedent-Supported Learning

Consequence-oriented: The learner is asked to perform, with learning contingent on feedback/reinforcement provided after the performance, with improvement indicated by increasing percentage of correct responses. (See "traditional training model")

advantage: There is a long history of theory and evidence supporting this approach to teaching for

several populations and teaching targets

disadvantage: This approach includes considerable failure, which is dangerous for some learners;

Antecedent-supported: The learner is provided with whatever support is necessary to produce the correct response, with improvement indicated by systematically decreasing levels of support (see “apprenticeship model” – also associated with “positive behavioral supports” in behavioral psychology)

advantage: There is little failure, which is important for those who need errorless learning because of their cognitive or emotional profile

disadvantage: Some people find it harder to document progress (not a real disadvantage); hard to mobilize needed supports in all contexts; for some people and some learning targets, failure is useful for efficient learning

Consequence-oriented: associated loosely with traditional operant behavioral approaches

Antecedent-supported: associated loosely with apprenticeship approaches and other “support” approaches

VII. Extrinsically Versus Intrinsically Reinforced Learning Trials

Extrinsically reinforced: Success is rewarded with a sticker, token, points or other reinforcer that is not naturally and logically related to the behavior in question

advantage: Desirable extrinsic reinforcers may have the effect of changing behavior quickly

disadvantage: Extrinsic reinforcers do not facilitate transfer to natural activities and may foster dependence on extrinsic reinforcement

Intrinsically reinforced: Success is rewarded with the logical and natural outcome of the behavior. For example, communication success is rewarded with satisfying interaction; academic effort is rewarded with a good grade;

advantage: Intrinsic reinforcement facilitates transfer to natural contexts and blocks undesirable dependence on extrinsic reinforcers;

disadvantage: Natural and logical consequences of a behavior may not initially be strong enough to motivate the behavior in the case of a person with a long history of failure

Extrinsic reinforcement: associated loosely with traditional operant behavioral approaches

Intrinsic reinforcement: associated loosely with “naturalistic” approaches

APPENDIX B

Decisions To Make About General Orientation Of Intervention:

Understanding of Assessment Processes and Options

Evaluator:

- language clinician?
- team of professionals (e.g., SLP, psychologist, OT, educator)?
- parents/communication partners?
- combination??

Focus: Impairment, Disability (Activity), Handicap (Participation)
impairment?

- disability (functional activity)?
- handicap (participation)?
- combination??

Focus: Domain of Functioning

- linguistic aspects?
- cognitive aspects?
- psychosocial/behavioral aspects?
- preacademic aspects?
- combination??

Primary Target of Assessment Efforts

- person with disability?
- communication partners?
- communication demands/ "curriculum"?
- combination??

Assessment Tools

- standardized, norm-referenced tests?

- ❑ spontaneous language sample (possibly including video or audiotape from natural environment)
- ❑ elicited language inventory?
- ❑ parent questionnaire/log?
- ❑ combination?
- ❑ observation of communication partners

Understanding of Intervention Processes and Options

Primary Agent of Intervention:

- ❑ language specialist?
- ❑ team (e.g., SLP, educator, other therapists, paraprofessionals, parents)?
- ❑ everyday communication partners (e.g., parents, peers)?
- ❑ combination??

Primary Focus of Intervention:

- ❑ impairment,
- ❑ disability (functional activity),
- ❑ handicap (participation),
- ❑ combination??

Primary Context/Setting for Intervention:

- ❑ therapy context 1:1;
- ❑ therapy context group;
- ❑ classroom?
- ❑ home?
- ❑ combination?

Primary Goals/Objectives:

- ❑ linguistic aspects of disability?
- ❑ cognitive-content aspects?
- ❑ psychosocial-pragmatic aspects?
- ❑ preacademic/academic/vocational aspects?

- ❑ combination??

Primary Target of Intervention:

- ❑ child/person with disability?
- ❑ communication partners?
- ❑ communication demands/supports?
- ❑ combination??

Primary Procedures of Intervention:

- ❑ traditional behavioral training (operant) model?
- ❑ social learning theory model?
- ❑ parentese model (focused stimulation, milieu teaching, NLP)?
- ❑ pragmatic model?
- ❑ Vygotskian apprenticeship model??
- ❑ combination?

Learning Trials: Emphasis

- ❑ discrete versus embedded
- ❑ massed versus distributed
- ❑ contextualized versus decontextualized
- ❑ planned versus incidental
- ❑ deliberate versus involuntary learning
- ❑ intrinsically versus extrinsically reinforced
- ❑ antecedent supported versus consequent managed

Goal Attack Strategy:

- ❑ vertical?
- ❑ horizontal?
- ❑ cyclical??

Sequence of Intervention:

- ❑ developmental sequence?
- ❑ remedial/functional need sequence?
- ❑ “pivotal” behavior sequence?
- ❑ combination??

Activities for Intervention:

- Where on the “naturalness continuum”?