A DEVELOPMENTAL MODEL OF TEACHER COMPETENCE

In 1979, the Education Department, in collaboration with the Office of Research and Evaluation and selected faculty across the discipline, began to work toward the development of a model of the generic abilities of the educator. A review of the literature in education competence was completed in the fall of 1979.

The Education Reconceptualization Group's aim was to identify the broad competences of the educator, across grade levels and content areas and including educating in informal settings (e.g. as practiced by a nurse or manager, as well as by a classroom teacher). Because the Alverno notions of *competences as developable abilities of the person* contrasts with notions in much of the research of *competences as discrete behaviors*, the Group began with wide-ranging discussion probing their experiences *as* educators and *with* other educators. After four years of discussion and refining work, a developmental model of teacher competence was captured in five "maps" showing the aspects of each ability as it typically develops from beginning to developing to advanced performance.

The Alverno conceptualization was used in the development of the beginning teacher standards by the Interstate New Teacher Assessment and Support Consortium (INTASC) in the early 1990s. The INTASC standards, in turn, became the basis for development of the Wisconsin Teaching Standards in the late 1990s. The Alverno abilities have been reviewed and updated periodically by the Education Division, drawing upon the National Board for Professional Teaching Standards work, among other resources.

The five abilities are identified as generic teaching skills:
- ***Conceptualization:*** Integrating disciplinary knowledge with educational frameworks and a broad understanding of human development in order to plan and implement learning processes.
- ***Diagnosis:*** Relating observations of behavior and situations using frameworks in order to foster learning.
- ***Coordination:*** Managing resources effectively to support learning goals.
- ***Communication:*** Using oral, written and media modes of communication to structure and reinforce learning processes.
- ***Integrative Interaction:*** Demonstrating professional responsibility in the learning environment.

The "maps" for each ability follow. The expectations of the ***Beginning Teacher*** characterize the expected performance of a teacher entering the field. Because the dynamic competences are further refined through experience and reflection on that experience, the expectations of the ***Developing Teacher*** characterize a stage of professional development usually demonstrated by teachers with several years of teaching experience. The expectations of the ***Experienced Professional Teacher*** are the mark of a master, demonstrating professional depth and development.

CONCEPTUALIZATION

Integrating disciplinary knowledge with educational frameworks and a broad understanding of human development in order to plan and implement learning processes.

Expectations for the Beginning Teacher	Expectations for the Developing Teacher	Expectations for the Experienced Professional Teacher

Expectations for the Beginning Teacher

Applying analytical skill to the integration of knowledge base and psychological/social/philosophical foundations of education
- Showing command of disciplines
- Presenting disciplinary knowledge in conceptual context

        Disciplinary knowledge bases,
           e.g., math, language arts, and
           pedagogical content knowledge

Linking   Frameworks related to learners
Frameworks   and learning, *e.g.,* developmental
           psychology, learning theory, motivation
           theory, motivation theory, etc. and
           school/relationships

        Liberal arts skills
           e.g., reflection, self assessment,
           epistemology, inquiry approaches
           etc.

Developing sensitivity to learners as individuals within the group as a whole
- Making links between learning and developmental theory and concrete individuals in order to use appropriate depth of information
- Recognizing the impact of differences (in culture, gender, learning preferences, etc.) in order to plan learning experiences that meets the needs of individuals and the group
- Planning material both to meet learners' current needs and to lead to the next level of development, *e.g.,*
    - preparing appropriate activities
    - relating learning experiences to previous work

Expectations for the Developing Teacher

Building increased ability to use disciplinary knowledge as a resource in facilitating learning

Continuing to expand and develop own knowledge bases in all these areas
- Trying out ways to link disciplinary knowledge to learner experience
- Seeking to learn more about learners and the communities from which they come
- Using varied sources of professional input

Increasing sensitivity to learners in a group and as individuals
- Trying to meet learners' perceived needs
- Recognizing and adapting to factors that impact on the individual learner's relationship to the environment, the subject matter, or other learners *(e.g.,* culture, gender, learning difference, etc.)
- Using awareness of varied perspectives and sources of difference to create activities to meet diverse learner needs
- Trying to stretch learners to the next steps in their development
- Sensing multiple possibilities, *i.e.*, the array of things that might happen, that one might do
- Predicting the impacts of various strategies
- Evaluating plans in relationship to outcomes in a systematic and ongoing way
- Constantly relating information to frameworks in order to increase understanding

Refining understanding of the system
- Knowing what others have done/are doing (*e.g.* in previous learning experiences)
- Knowing the whole educational sequence and learners in relationship to it
- Knowing available technology resources (*e.g.,* tele-communications, multimedia, etc.)

Expectations for the Experienced Professional Teacher

- Showing commitment to a style of thinking within one's discipline
- Making explicit the impact of one's discipline knowledge on the design of instruction
- Taking responsibility for clear presentations providing for common experiences
- Finding ways to make links with learners' ongoing experiences, especially those that are different from one's own (*e.g.,* cultural and social experiences)

Showing high ability to pick the right strategy for the right situation
- Calling forth higher-level learning
- Facilitating high-level discussion that engages learners in constructing their knowledge and critiquing it
- Figuring out the patterns in interaction to help the learner bring analytic thinking to a new level
- Helping all learners to develop a high level of media and computer literacy

Modeling an adult learning process
- Showing growth and reflecting on own growth
- Shaping the relationships between the concrete skill processes being focused on and learners' own lives to show the environment as transforming
- Acting with creative awareness of how to use the system to support and promote learner success
- Operating with autonomy, able to single-handedly manage multiple schemes, individuals, and interactions
- Engaging in research related to teaching, learning, and assessment practices

CONCEPTUALIZATION

(Continued)

_ helping learners to relate disciplinary knowledge to "real life" experiences
_ using structures to support learner organization of information
_ using media and technology to meet learning needs
. Analyzing the effect of activities on both individuals and the group as a whole

Developing an understanding of the system within which one works
. Recognizing communication networks in the organization
. Learning the history and philosophy of the organization
. Becoming aware of developmental sequences in the system
. Developing awareness of varied perspectives and sources of differences
. Becoming aware of problematic issues inherent in the system

Developing an awareness of oneself as a part of the transformational process
. Recognizing one's own biases
. Recognizing area of needed growth and development (*e.g.,* regarding technology)
. Taking responsibility for one's professional role
. Reviewing professional standards

Refining sense of self within the system
. Developing leadership roles
. Developing intellectual linkages
. Involving self in networks and collaborative endeavors
. Developing tolerance for ambiguity by making links between the ideal and the real
. Monitoring professional standards

Acting as a professional
. Using leadership roles to impact positive
. Working effectively with others to support professional growth
. Contributing to the development of professional standards
. Articulating the impact of multiple factors in the learning process, *e.g.*,
  _ how issues of diversity and justice affect the learning environment
  _ how media and technology have an impact on school and society, and particularly on school reform

DIAGNOSIS

*Interpreting observations of behavior and situations using frameworks
in order to foster learning*

Expectations for the Beginning Teacher	Expectations for the Developing Teacher	Expectations for the Experienced Professional Teacher

Observing   Person(s)
               Environment
               Process

Questioning   To get information
               To help learners to question

Working inductively and experientially, with flexibility and open-mindedness

Practicing two-fold skills of observing and questioning:
. Collecting information through observation of interaction and through questioning
. Developing frameworks to understand the information coming in
  _ Understanding and drawing upon already existing frameworks related to learners and to the learning process
  _ Not distorting concrete experiences to fit frameworks
  _ Not distorting frameworks to fit experiences
  _ Rethinking information and creating new theories
  _ Designing and selecting assessment instruments appropriate to the learning outcomes
  _ Determining appropriate learning prescriptions

. Generally making this an ongoing process
  _ Gathering information/developing frameworks in an ongoing cycle
  _ Continuing to monitor aspects while prescription is in place
  _ Evaluating learner performance using appropriate criteria and providing focused feedback
  _ Integrating awareness of learner needs into planning
  _ Identifying needs for own ongoing professional development

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Using memory effectively
. Using accrued experience to see both   Group Patterns of Behavior

                    Individuals Patterns of Behavior (especially as they deviate from group patterns)

. Using prior concrete experience to lead to or trigger further questions and explorations
. Practicing a developing ability to call upon memory "right then and there," building ability through experience, reading, study

Sharpening two-fold skills
                Experiencing specific individuals concretely
. Observation Relating to framework, combinations of frameworks

                Developing range in dealing with data and frameworks
                Beginning to recognize relativity
. Frameworks   of frameworks and variety of data
                Learning to resort data until a solution emerges that betters fits the actual experience

Recognizing multiplicity and working toward tolerance for ambiguity
. Beginning to sense self as a continually developing professional
. Accepting awareness that there is never a "perfect fit" between theory and concrete examples

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Demonstrating flexibility in actively seeking information or frameworks with which to probe information

. Can give up one thing to try for something else

Showing commitment to diagnosis as an ongoing process
. Continuing to go back over the same ground, experimenting, trying different angles, creatively and eclectically hypothesizing
. Making decisions "for the time being"
  _ Knowing that diagnosing continues even in implementation
. Using developing skill
  _ knowing when to let go of data and go to a framework
  _ Knowing when to let go of framework(s) and go back to data
. Recognizing multiplicity
  _ Linking relationships across all components even as components increase
  _ Making observations that are
    - polymodal
    - instantaneous
    - integrated

Using effective interpersonal skills that have been honed to gather information
. Withholding judgment and decision until having sufficient evidence
. Sensitive to what is developing at the moment
. Teaching to/through what is developing at the moment

DIAGNOSIS

Developing awareness of ways to diagnose learner needs based on information from varied perspectives
_ Understanding the role of the environment and teacher expectations in learning
_ Seeking input from the local community on issues of importance in the social context to guide teaching choices and to prepare for meeting diverse learner needs
_ Analyzing learning needs and prescribing strategies to enhance learning
_ Developing a range of assessment strategies to support learning, *e.g.*, simulations, performances, writing experiences, etc.

. Avoiding dangers:
  _ Making the concrete so powerful that one fails to see how the framework fits
  _ Being so ready with the framework that one fails to probe the actual experience
. Promoting learners' development of self assessment

Diagnosing learner needs based on knowledge and understanding of their varied perspectives
. Incorporating aspects of issues of social concern into learning exploration
. Integrating a variety of media and technology lessons to provide for a wide range of experiences
. Promoting critical media literacy skills for all learners

COORDINATION
Managing resources effectively to support learning goals

Expectations for the Beginning Teacher	Expectations for the Developing Teacher	Expectations for the Experienced Professional Teacher

Developing the use of resources toward learning goals
. Helping learners to make sense out of resources for learning
  _ Identifying   varied resources, including
  _ Allocating   time, space, activities, concepts,
  _ Organizing   frameworks, media and technology,
  _ Managing   and community resources

Structuring the learning environment
. Creating a climate of acceptance and willingness to learn
. Shaping the environment to provide for data gathering, reflection, practice, etc.
. Integrating uses of technology into daily learning
. Creating variety in learning activities
. Dealing with both individuals and groups

Collaborating with learners and others for the sake of the learners
. Making links with the learners' other environments
. Drawing upon professional colleagues
  _ Coordinating the effect all members of the system have in all the learning taking place
  _ Trying out new ideas with the goal of reaching all learners
  _ Sharing plans, problems, ideas
  _ Infusing diversity throughout the learning experiences

Monitoring the processes of learning
. Linking practice with data base
. Linking frameworks in an ongoing way to allow ongoing evaluation, adjustment, and adaptation in practice
. Maintaining effective records of learning, including portfolios that include examples of performance
. Using appropriate technology
. Teaching in a manner that supports assessment as learning

Establishing an initial confidence in self as teacher
. Developing skills of self-assessment
. Effectively drawing upon resources
. Flexibly dealing with change

Integrating the use of resources in focused learning experiences
. Focusing strategies to effect movement to learning goal
. Stimulating skill building in learners
. Initiating student involvement in managing resources
. Implementing media and technology resources
. Integrating multimedia and technology throughout learning experiences

Building skills in collaborating
. Developing relationships to enhance the levels/ fronts of student learning
. Seeing the learner as self-teacher
. Seeing that all the "worlds" that learners bring with them into their relationship with you are other arenas in which learning is going on
. Establishing consistent interaction lines with other teachers
  _ Actively seeking and giving feedback and sharing experiences and ideas with colleagues in same system and across systems
  _ Using media to support cooperative learning

Developing skills in monitoring student growth
. Moving back and forth easily from action to reflection to action

Acting with increased confidence in self as a **tool** of learning
. Practicing self assessment
. Seeing self as informed with knowledge
. Seeing self as interacting with much experience
. Seeing self as comfortable and flexible in action

Practicing as teacher within institutional framework
. Structuring environments to make effective use of institution as resource
. Assisting learners to identify resources
. Managing and integrating varied resources toward learning goals
. Collaborating across the institution and with wider society in systematic networks
. Monitoring impacts of large and small aspects of learning environments
. Collaborating with those inside and outside the school to implement technology

Demonstrating highly-skilled adaptation to changing situations
. Responding to needs quickly
. Handling multiple levels of interaction and understanding

Merging elements of autonomy and collaboration in working in an effective, productive style

Actively continuing one's own ongoing, experiential learning

Acting with developed professional values
. Practicing self-assessment in all aspects of the teacher role
Articulating a philosophy of teaching, learning, and assessment
. Committed to processes that lead to goals and seeing self as part of the process that leads to goals
. Making choices out of professional values
. Co-creating with others to make the whole institution a learning environment

. Taking initiative

COMMUNICATION
Using oral, written, and media modes of communication to structure and reinforce learning processes

Expectations for the Beginning Teacher	Expectations for the Developing Teacher	Expectations for the Experienced Professional teacher

Using voice and manner to create a sense of presence and involvement
. Beginning to use communication to establish the learning environment (through effective use of eye contact, voice variation, body language, movement, room arrangement, etc.)
. Recognizing the need to adapt communication for diverse groups
. Demonstrating skills in self-presentation in professional contexts

Using legible media purposefully and skillfully as a support to presentations
. Selecting/producing media to support learning goals
. Using media and technology resources to facilitate learning

Showing internalization of content
. Making goals of learning activities clear
. Creating presentations marked by ...
  _ clarity of concepts
  _ accuracy of information
  _ alternative explanations
  _ adaptation to audience
  _ effective integration of media and technology

Demonstrating professional quality in own writing and speaking
. Communicating clearly and appropriately in multiple settings
. Using appropriate language and format in written communication

Effectively creating a sense of presence and involvement
. Adapting in response to awareness of diverse learner needs
. Demonstrating growth in presentation skills

Refining use of media out of a growing awareness of how learners process information
. Modeling effective teaching with technology
. Choosing, creating, using media and technology to support learning
. Integrating media and technology to convey information and to enhance presentations
. Providing numerous opportunities for learner interaction with media and technology

Increasing means of linking content and teaching strategies
. Developing a greater range of adaptation to audience needs
. Designing short explanations for concepts or procedures from many different perspectives

Refining ability to communicate effectively across a range of professional situations
. Developing adaptive skill in tailoring communication to new needs
. Rethinking routine communications and continually recasting them out of ongoing experience

Structuring the physical/interpersonal environment as a means of communicating content
. Through sensitivity and personal presence, communicating that as a learner, one can also teach others
. Adapting the environment to support teaching/and learning for a diverse range of learners
. Reinforcing and motivating learners through effective communication

Demonstrating versatility in the creative preparation and use of varied media
. Planning for the stimulation of many learning styles and modes, *(e.g.* visual, aural, kinesthetic)
. Creating presentations that have multiple levels in order to meet many learners and to move each to a new place
. Integrating the use of technology in preparing and presenting learning experiences
. Implementing learning experiences which reflect an awareness of media literacy
. Practicing growth in presentation skills

Demonstrating understanding of content area/ discipline in both theoretical and experiential ways
. Adapting presentations that can reach out to the experience of the learners
. Translating information and experiences into multiple modes

Modeling effective communication
. Showing understanding of complex, multi-faceted situations
. Communicating knowledgeably about the use of technology in education
. Communicating explicitly own philosophy of education

- Adapting effectively as contexts change
- Searching out professional literature to support own development as professional and to integrate in presentations related to profession

INTEGRATIVE INTERACTION
Demonstrating professional responsibility in diverse learning environments

Expectations for the Beginning Teacher	Expectations for the Developing Teacher	Expectations for the Experienced Professional Teacher
Believing as a <u>director</u> of learning in the developing knowledge, understanding and abilities of learners	Believing as a <u>colleague</u> with learners in sharing responsibility for learning	Believing as an <u>advocate</u> of learning in motivating, in relating to the learner, in sharing judgment
Perceiving and responding to basic elements of the complex of variables present in interaction, *e.g.*, roles, developmental levels, situation, relational definitions, emotions, content, environment, etc.	Demonstrating growing awareness of the complex of variables present in interaction	Demonstrating sophisticated awareness of the complex of variables present in interaction, their mutual impact, and their ongoing negotiation by the interactants

Believing as a <u>director</u> of learning in the developing knowledge, understanding and abilities of learners

Perceiving and responding to basic elements of the complex of variables present in interaction, *e.g.*, roles, developmental levels, situation, relational definitions, emotions, content, environment, etc.
. Welcoming and celebrating diversity
. Listening/connecting/providing different perspectives in response to learner activity
. Giving satisfactory answers to learner's questions/comments
. Stimulating learners to question and respond
. Guiding interlearner discussion
. Modeling learning by making explicit what one is doing
. Encouraging individual participation while effectively directing group activity
. Using feedback to assist learners to become self-starting learners
. Nurturing learner development

Demonstrating awareness of the limitations inherent in the situation, the learners, and self
. Showing respect for varied learner perspectives
. Demonstrating an adequate understanding of individual differences, especially cultural, gender and psychological differences
. Dealing with individuals in a way that recognizes their personal qualities
. Making connections between/among different cultural groups
. Designing learning to best relate to the characteristics of the group and individuals within it
. Reflecting an awareness of the effect of media on learning

Taking responsibility   for diagnosis and assessment (and sharing both with learner)
          for intervention by designing effective strategies for growth
. Dealing with a range of classroom situations with confidence and calm

Believing as a <u>colleague</u> with learners in sharing responsibility for learning

Demonstrating growing awareness of the complex of variables present in interaction
. Recognizing how aspects of interaction affect the teacher and the teacher's strategies
. Adapting possible responses out of increased experience
. Enlarging one's repertoire of interaction skills
. Differentiating responses in interacting one-on-one and

  with the group

Extending ability to assist learners to become more independent
. Providing structures within which learners can create their own perspectives
. Providing other perspectives for learners to test their knowledge
. Providing a wide range of media and technology options to engage learners with multiple perspectives and global issues

Taking responsibility for increasing professionalism
. Developing identification as a professional
. Acting on professional values
. Relating effectively with peers and superiors
. Relating to systems and institutions
. Seeking opportunities to develop new skills/knowledge

Integrating other skills:

Believing as an <u>advocate</u> of learning in motivating, in relating to the learner, in sharing judgment

Demonstrating sophisticated awareness of the complex of variables present in interaction, their mutual impact, and their ongoing negotiation by the interactants
. Constantly making adjustments in activities, not out of a pre-planned program, but in response to relevance of learners' experience and knowledge and the reality of the broader societal sphere of influence on their lives
. Using nonverbal cues to test out ways in which

  the responsibility /activity for learning can be

  shifted to the learner

Assisting learners in the habit of taking multiple perspectives
. Showing commitment to the process of going from experience to conceptualization
. Encouraging learners to seek out and explore

  multiple perspectives

Taking responsibility for and to the state of education
. Identifying as a professional
. Acting out of an explicit philosophy of education
. Working with local/broader spheres of influence
. Promoting others to become technology supporters
. Advocating for the use of technology in education
. Facilitating curriculum reform through the integration of media and technology

INTEGRATIVE INTERACTION

(Continued)

Integrating other skills:

Diagnosis - Observing, questioning, gathering information, monitoring aspects while in progress

Communication - Using presentation as a stimulus and a focus for interaction

Conceptualization - Developing an understanding of the system, recognizing developmental expectations

Coordination - Collaborating with learners and others

Integrating other skills:

Diagnosis

. Using memory to see patterns in order to trigger further questions and experiences

. Experiencing concrete behavior of individuals

Communication

. Focusing presentations to capitalize on learners' experiences

. Designing presentations to stimulate learners' interaction/questioning in new directions

Conceptualization - Showing multi-faceted

Coordination - Collaborating, establishing interaction with other teachers

Integrating other skills:

Diagnosis + Practicing diagnosis as an ongoing process

Communication + Shaping presentations to teach to higher level outcomes

Conceptualization - Overcoming lack of common knowledge through attention to both breadth and depth

• Showing refined sensitivity to the learner

• Interacting effectively with systems across the entire field of education

Coordination - Acting with developed professional values